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A Monthly Magazine

OF

CURRENT MEDICAL LITERATURE AND NEWS.

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JANUARY, 1864.

ADDRESS.

THE question which will, doubtless, arise in the minds of many upon our first appearance, will be "Is there room for a new professional journal?" Some persons, without waiting to form an opinion, will unhesitatingly answer "No!"; others, who look only at the dark side of a question, overwhelmed with thickly-crowding recollections of this or that unsuccessful periodical, will indulge in strange forebodings of evil; others, again, favourably disposed on the whole, but imbued with a pre-determination to be right whichever way things may go, will shake their heads gravely, assume a puzzled air, and say oracularly, "Well, it may get on for a time;" and, finally, some (we hope not a few) will probably observe, that they can see no reason why we should not succeed, since, with the single exception of a monthly periodical published in Scotland, there is no paper in Great Britain which serves to fill up the wide space of distinction between the medical weekly journals and quarterly reviews. *Our* view of the answer to this question needs no allusion, beyond the expression of a hope that we may, in due time, convince all of the correctness of the conclusion at which we have arrived.

One of our chief objects in starting the "Medical Mirror" will be to occupy the intermediate position just referred to, and we shall aim at the production of a cheap and useful serial, which, although essentially a Review, shall contain a fair proportion of

information upon current topics of professional interest. In order to carry out this design, the general contents will consist of Original Communications, Reviews and Notices of British and Foreign Medical Works, Abstracts of Important Papers selected from the principal Medical Periodicals published in this country and abroad, occasional articles upon Science and General Literature, Professional News, Reports of Hospitals and Learned Societies, Correspondence, Lists of Recent Vacancies and Appointments, Pass-Lists of the various Examining Boards, Obituary, &c. We shall thus present a variety of subjects suitable to all tastes.

The year upon which we are now entering, promises to be of no ordinary character, in a medical point of view, so that the present is a favourable period for the commencement of our undertaking.

The completion of the National Pharmacopoeia, after years occupied in its compilation, will, of itself, mark an epoch in professional literature, whilst many of the new books and new editions recently published, or announced as nearly ready, are of a superior class.

In medical politics, the year 1864 will be an unusually important one. The Legislature will have submitted for their sanction a Bill for empowering valuable alterations in, and additions to, the Medical Act of 1858, which has been unfortunately proved by experience to be lamentably deficient, vague, and weak in those clauses which more especially affect the vital interests of the profession; and the General Council of Medical Education and Registration, repeatedly urged from without, and greatly modified in constitution by the accession of new and earnest members, will most likely exceed the average of previous years in the transaction of business calculated to benefit the profession, and to protect the community generally, by devising some efficient method of punishing the vile wretches, who, acting under the disguise of qualified medical men, and sometimes even without that cloak for their nefarious proceedings, prey parasitically upon the purses and constitutions of Her Majesty's subjects. It is highly probable, also, that considerable modifications will be introduced into the curriculum of study at present enforced by our Medical Examining Boards, which, as has lately been forcibly shown by Mr. Syme and others, tends

too much to the development of theoretical, at the expense of practical, knowledge.

We shall do our best to keep our readers fully acquainted with the progress of these and other important matters.

We are unfettered by the influence of any clique or individuals, and are blinded by no feelings of animosity towards any other Medical Journal, so that we start upon neutral, and, at the same time, thoroughly independent grounds. We, consequently, have it in our power, as well as in our wish, to expose error or injustice, in whatever form they may assume, and we shall not hesitate to do so whenever it may appear desirable for the professional good.

Having now given an outline of the course which we shall attempt to pursue, it will be unnecessary for us to occupy further attention. We cannot, however, allow this opportunity to pass without the expression of our warmest thanks for the numerous promises of support and co-operation which we have received during the short period which has elapsed since the first announcement of the "Medical Mirror;" and if we succeed in gaining for that paper the position to which we hope to attain, we shall, in future years, consider our success as having been, in no small degree, due to the kind encouragement which has thus early been extended to us.

ORIGINAL COMMUNICATIONS.

On Astigmatism and its Correction by Cylindrical Lenses. By J. ZACHARIAH LAURENCE, F.R.C.S., M.B. Univ. Lond., Surgeon to the Surrey Ophthalmic Hospital, and to the Hospital for Paralysis and Epilepsy, &c.

IF, for the sake of precision, we call the centre of the cornea the anterior pole of the eye-ball, the corresponding point at the back of the globe its posterior pole, then a circle passing through both poles is a "meridian."* In general, it has been assumed that all the meridians of the cornea were circles of equal curvature, and that, consequently, the cornea refracted equally in all its meridians. Such, however, is not strictly the fact. The cornea has been clearly proved to be not the section of a sphere, but of an ellipsoid, with three unequal axes, the long (antero-posterior) axis corresponding to the axis of the globe; whilst the other two axes are one, the longer, as a rule, horizontally, the other—the shorter axis—vertically disposed. The consequence of this is that (with one fixed accommodation) vertical and horizontal rays of light have two different foci. To see a vertical line distinctly, all the horizontal rays emanating from it must be accurately focussed on the retina. The vertical rays have no such necessity, for the circles of diffusion resulting from imperfect focussing overlap one another, so as not to interfere with the definition of the line, excepting at its upper and lower ends. *Mutatis mutandis*, the same facts hold good as regards the accurate perception of horizontal lines. If we now, on a piece of cardboard, draw a set of vertical and a similar set of horizontal lines, accurate observation shows that very few eyes are able to perceive both sets at the same time with the same degree of distinctness. This proves that few, if any, eyes possess the same focus for horizontal and vertical pencils of light. This inequality of refractive power of the different meridians of the eye-ball was named by Professor Whewell "Astigmatism" (from *a*, privative and *στίγμα*, point = focus). Astigmatism is, then, a normal state of the human eye-ball; but it exceptionally amounts to so substantial an optical defect as to require treat-

* If we call a line passing through the yellow spot and the centre of the eye-ball the optic axis; one passing through the centre of the cornea, and the centre the globe's axis; then in emmetropic eyes the optic axis cuts the globe's axis to the inner side of the cornea's centre at about an average angle of 5°, in myopic eyes of 2°, in hypermetropic eyes of 7°.

ment, and in this sense only we shall hereafter employ the term in question. Up to the time of Donders's recent researches, only eleven cases of astigmatism had been recorded during a period of nearly seventy years. Thomas Young, in 1793,* was the first to discover this defect in his own eye. This, "in a state of relaxation, collects to a focus on the retina those rays which diverge vertically from an object at the distance of ten inches from the cornea; and the rays which diverge horizontally from an object at seven inches distance." † Consequently, the refraction of his globe was greater in the horizontal than in the vertical meridian. In 1827, Professor Airy published a remarkable instance of the same anomaly in his own (left) eye. ‡ It will be readily understood that astigmatism may ensue from other causes than those of an inequality of curvature of the meridians of the cornea. The same inequality in the curvature of the surfaces of the lens, any abnormal position (or dislocation) of this latter will produce astigmatism. Many persons who wear glasses are doubtlessly constantly astigmatic from the slanting positions the lenses of these glasses acquire from imperfect adaptation of the frames, or from their bending, by the habit many persons have of carrying their spectacles carelessly in their pockets without the case. Astigmatism may be recognised by the following signs:—

1. A defect in visual power of an optical nature not remediable by ordinary spherical lenses. A patient presents himself with defective vision. With or without ordinary glasses, as the case may be, he finds it impossible to read, say No. 19 of Jäger, at twenty feet. This may be due to some organic or functional disease of the tissues of the globe; or it may be due to astigmatism. To which of these two categories it belongs becomes, then, a matter of further investigation.

2. For simplicity, we may regard the rays of light emitted from a luminous point as consisting of two sets—vertical and horizontal rays. If an astigmatic eye unites either of these two sets accurately to a focus point on the retina, the other set forms a linear image (produced by a series of circles of confusion linearly disposed) on the retina. Thus an astigmatic patient, instead of perceiving a luminous point as a point, perceives it as a line, vertically or horizontally disposed, according as, by his accommodation, he is focussing the horizontal or vertical rays respectively. But the refraction of the eye in question may be such as to prevent the patient's bringing either of these two sets accurately to a focus. In such a case, where the circles of confusion are exactly of the same size, the luminous point will

* Philosophical Transactions, vol. lxxxiii., p. 169.

† Philosophical Transactions, for 1801.

‡ Transactions of the Cambridge Philosophical Society for 1827, vol. ii., p. 267.

appear as a circle of diffused light in all other positions between the two linear images as an ellipse with its major axis, vertical or horizontal, according as the circles of confusion arising from the vertical or horizontal rays are the larger in area. But, as will readily appear from a little reflection, we can always find a lens, either convex or concave, which will unite the less or more refracted of the two sets of rays. The direction of the line observed by aid of the convex lens represents that of the meridian of maximum curvature (refraction) of the cornea, and *vice versa* with the concave lens. The distance between the two linear images is the "focal interval" of Sturm, and varies proportionately to the astigmatism present. All these facts may be beautifully illustrated by observing the forms of the images thrown on a screen from a distant luminous point by a refractive combination, say, of a 6-inch ordinary spherical convex lens, next to which is placed, say, a 30-inch convex cylindrical lens,* with its axis, say, vertical. When the screen is five inches from this compound lens, the horizontal rays will be accurately united to a focus, having been refracted (1) by the 6-inch spherical, and (2) by the 30-inch cylindrical lens ($\frac{1}{6} + \frac{1}{30} = \frac{1}{5}$). The vertical rays, on the other hand, are in progress of union to a focus, but are not yet united, and will, consequently, by their circles of confusion, produce a vertical line on the screen. When, on the other hand, the screen is six inches from the compound lens, the vertical rays are united to a point, whilst the horizontal ones, having been already united at five inches, as above, have diverged again, and form an horizontal line on the screen. In an intermediate position, between five and six inches, the image is that of a circle, whilst in front of this circle it is an ellipse, with its major axis vertical; behind it, one with its major axis horizontal. If we suppose the screen to be fixed, as the retina is, say in some position intermediate between either of the positions necessary to exhibit either of the two linear images, a little reflection will show that, by means of an appropriate convex or concave lens, we may throw forwards or backwards the entire system of images in such a way as to successively bring the horizontal or vertical linear images on to the screen. Or we may suppose the screen fixed altogether in front or altogether behind the limits of the two lines (the focal interval). In the first case (one of inequality of hypermetropia in the two meridians), an appropriate convex lens will evoke a vertical line, a still stronger one

* I find the most convenient source of obtaining a luminous point is from a magic lantern, the light from which is allowed to pass through a perforated blackened diaphragm. The cylindrical lens in question (as will be hereafter fully explained) refracts all the horizontal rays of the luminous point to a focus at 30 inches, whilst all the vertical ones undergo no refraction whatever, but pass through perfectly unchanged in their direction. The screen in our experiment represents the retina.

an horizontal line on the screen, and *vice versâ* in the second case (one of inequality of myopia in the two meridians); and these experiments are most instructive, and agree very accurately with what is observed in most cases of marked astigmatism.

A consideration of the above facts will explain all the various appearances a luminous point may assume to an astigmatic eye, with or without the aid of an auxiliary lens. In all these experiments it is absolutely necessary that the patient should hold the head perfectly vertically, as the directions of the linear images vary according to the inclination of the head.

3. The inability to perceive vertical and horizontal lines at the same time with equal distinctness. The *rationale* of this has been before considered, and is a mere case of linear aggregation of luminous points. As from (2) may be inferred, the indistinct set may be rendered distinct by an appropriate spherical lens, when the set previously distinct becomes indistinct.

4. We may destroy the astigmatism by letting the patient see through a narrow slit (about two millimetres broad); this permits only the vertical or horizontal rays of objects to strike the cornea accordingly as it is held vertically or horizontally. We may thus investigate the refraction of each meridian separately; this may be normal, myopic or emmetropic (the latter two may be of different degrees), so that we may (theoretically) have eight different varieties of refraction of the cornea. The most common case is for the cornea to have its maximum refraction in the vertical meridian, as in Airy's case, but it may be in the horizontal meridian, as in Young's, whose case is further exceptional in the astigmatism having been due to some irregularity of the lens, whereas it is in by far the vast majority of cases due to some irregularity of curvature of the cornea.

5. Astigmatism may be remedied by cylindrical lenses, always presupposing that any general optical defect of the eye has been previously corrected by its proper spherical lens.

A spherical lens is a segment of a sphere, and refracts the incident rays of light equally in all planes of the segment; a cylindrical lens is the segment of a cylinder, and refracts rays of light most in a plane at right angles, to the axis of the cylinder, of which it is a segment, whilst those rays of light which strike it in the plane of the axis, undergo no refraction whatever. For the sake of simplicity we may therefore restrict our considerations to these two directions—that of the axis and that of the transverse diameter. A 6-inch convex cylindrical lens means one which refracts a pencil of parallel rays, thus (1) those which strike it parallel to the transverse diameter of the cylinder are focussed at 6 inches from the surface of the lens, (2) those which strike it parallel to the axis of the cylinder are not focussed at all by the lens, but pass through it refracted not more than they

would have been by passing through a piece of plain glass. Of a pencil of parallel rays striking a 6-inch concave cylindrical lens (1), those which impinge in the plane of the transverse diameter acquire thereby a divergence as if they had proceeded from a point 6 inches from the surface of the lens, whilst (2) those which impinge in the plane of the axis retain the same direction they had before impaction. It is thus apparent that we in cylindrical lenses have (as was first pointed out by Airy) the means of correcting the refraction of one meridian of the eye, leaving the other in its original state—of correcting the astigmatism.*

The following cases are illustrative of the facts and principles laid down in this paper:—

CASE I.—*Myopic Astigmatism ($\frac{1}{20}$) Due to Unduly High Curvature of the Vertical Meridian, remedied by a Cylindrical Lens.*

Mr. A., æt. 24, consulted me recently for acute asthenopic symptoms, which had become more especially severe during the time he had been reading hard for a University degree. He had for many years worn concave glasses, which he had found it necessary to change several times for ones successively stronger, till he now uses ones of 5-inch focal length. There was no marked insufficiency of the internal recti-muscles. Before examining his eyes with the ophthalmoscope, I expected to find extensive staphylomata postica, if not more serious organic lesions, of the fundus oculi. But to my surprise the appearances were altogether at variance with the apparently high degree of myopia present. In truth there were hardly any appreciable deviations from the natural state of the fundus, nor was the indirect image definable without the use of an object lens.

This led me to suspect the presence of astigmatism.

Left eye.—(1) With 6 inch concave at 8 feet, vertical lines appear very indistinct, horizontal ones distinct, and *vice versa* with 14-inch concave.

(2). With 4-inch concave at 8 feet, a luminous point appears as a narrow horizontal line, thickened at its centre with a 12-inch concave as a narrow vertical line.

(3). Further investigation showed that the eye was myopic in the horizontal meridian to a $\frac{2}{20}$ in the vertical to a $\frac{3}{20}$.†

With a combination of a 10-inch spherical concave, and a 20-inch cylindrical concave (axis horizontal), the appearances (1) and (2) disappeared, and his *visual power was exactly double* of that with his old glasses on (from $S = \frac{1}{4}$ to $S = \frac{1}{2}$). For at 8 feet with 5-inch concave on, he only read XXX; with the above combination he read XV.‡

* A complete set of cylindrical trial-lenses may be procured of Murray and Heath, 143, Piccadilly.

† The numerical discrepancies in observations (1), (2), and (3), are probably due to variations in the patient's involuntary accommodation.

‡ In Snellen's and Giraud Teulon's Test-types, the types are numbered according to the distance they should be readable to a normal eye. Thus, XXX., XX., V., &c., are respectively readable at 30, 20, 5, &c., feet. If we by S designate the visual power of an eye, then for a normal eye $S = \frac{XXX}{30} = \frac{XX}{20}$

$= \frac{V}{5}$ &c., = 1. If, on the other hand an eye at e.g., 15 feet, only reads XXX.,

then $S = \frac{XXX}{15} = \frac{1}{2}$ and so on.

The right eye was also astigmatic, though not to quite so high a degree as the left.

This case is interesting from its singular completeness, illustrating, as it does, nearly all the preceding observations in a truly practical manner.

CASE II.—*Myopic Astigmatism ($\frac{1}{20}$) Limited to the Right Eye—Oblique Position of the Axes of Curvature.—Application of a Cylindrical Lens.*

Wm. M., a painter, applied at the Surrey Ophthalmic Hospital in September, 1863, on account of his sight gradually failing him, especially in his right eye. He had never had any symptoms of lead-poisoning, excepting slight wrist-drop. Notwithstanding this his failure of sight had been attributed by a well-known ophthalmic surgeon to lead.

On testing his vision I found that with 11-inch concave to the right eye he read No. 23 at 20 feet; with the left eye No. 20; but with 24-inch concave, No. 18 at the same distance.

The ophthalmoscope disclosed evidence of subacute retinitis in both fundi, and a singularly distinct and extensive pulsation of the retinal veins in both eyes.*

After treatment of the retinitis, his vision improved in either eye; but still that of the right eye remained almost as defective as before, till at last we began to suspect the presence of astigmatism, which was completely established by the following observed facts:—

Right eye.—At 8 feet with 9-inch concave sees vertical lines somewhat plainer than horizontal ones; with 12-inch concave the reverse. With 12-inch concave a luminous point assumes the appearance of a point with two linear expansions directed upwards and inwards, at an angle of about 20° from the vertical. With a 12-inch concave spherical, plus a 20-inch concave cylindrical lens, its axis inclined as above, he is enabled to read No. 19 at 20 feet, although with either glass alone he cannot read No. 23 with any degree of certainty!

If he with a 9 inch concave regards a series of lines inclined at about 20° to the vertical, and a second set at right angles to these latter, both set appear equally distinct to him. An oblique position of his head, or of the concave glass, produces the same effect.

The inference to be drawn from the above facts is that in the right eye there is a general myopia of $\frac{1}{12}$, with a second superadded myopia of $\frac{1}{20}$ (constituting the astigmatism), in the upward and inward meridian of the globe.

CASE III.—*Myopic Astigmatism ($\frac{1}{16}$) in the Vertical Meridian, remedied by Cylindrical Lenses.*

Hannah M., aged 24, a tailoress, consulted me at the Surrey Ophthalmic Hospital in September, 1861, on account of asthenopia, from which she had suffered for the last ten years. The symptoms were dimness of vision, a sensation of "burning" in the eye-balls, congestion, and lachrymation, all of which came on after reading, etc., for a quarter of an hour, or after five minutes, if she had previously been hard at work at her business. I found that No. 22 was the highest type she could read at 15 feet distance; and finding that no glasses, either convex or concave, enabled her to read any lower type, I, after a month's ineffectual treatment by tonics, eye-waters, rest, etc., gave her case up in despair.

On the 13th of February, 1862, I desired her to call on me, with a view of seeing whether, perhaps, her symptoms depended on astigmatism.

* Since my attention has been drawn to this fact, I have found pulsation of the retinal veins a by no means uncommon incident to the normal fundus oculi.

Repeated examinations have yielded the following results with each eye :—

(1). On requesting her to regard a luminous point of two millimetres' diameter, and placing a 20-inch convex lens before the eye, she, after a time,* declared it appeared to her as a narrow vertical line.

(2). On her regarding a series of black, vertical and horizontal lines at about 8 feet off, she saw the vertical ones perfectly distinctly—the horizontal ones very indistinctly : a 16-inch spherical concave glass reversed the order of things—the horizontal lines then became distinct, the vertical ones indistinct.

(3). With the naked eye, at 12 feet, she could read no lower than XX. of Snellen's Types ; but with a cylindrical concave lens of 16 inches' focus, she read XII. Thus, her "sharpness of definition" increased from $\frac{1}{2}\frac{2}{3}$ ($=\frac{2}{3}$ nearly) to 1—became, in fact, absolutely perfect. This only occurred, however, when the axis of the cylindrical lens was transversely placed : if vertically, she could hardly see at all. In order to eliminate all source of error, I tried the crucial experiment of placing an ordinary (spherical) 16-inch concave glass before the eye : this only made her see worse than with the naked eye.

I then found that she, with her cylindrical glasses, could also read an ordinary printed book at a usual reading distance without feeling any fatigue in the eyes.

Both eyes, on careful examination, proved to be equally astigmatic.

From the above, it follows that this patient's eyes possess a normal refraction in their horizontal meridians, but are myopic ($\frac{1}{16}$ th) in the vertical ones, her astigmatism equalling $\frac{1}{16}$ th.

CASE IV.—*Hypermetropic Astigmatism* ($\frac{1}{8}$) of *Left Eye*.

Mary D., æt. 49, consulted me on November 15th, 1862, on account of asthenopic symptoms. After repeated examinations, I found that she was emmetropic in the right eye, but that in the left eye there existed an hypermetropia of $\frac{1}{8}$ limited to its horizontal meridian, as evidenced by the following facts :—

(1). Horizontal lines at 8 feet appear to her more distinct than vertical ones, and *vice versa* with 18-inch convex. 18-inch convex, cylindrical, axis vertical, makes both set appear equally distinct.

(2). With 18-inch convex a luminous point assumes an oval shape, the axis being slightly out of the vertical.

(3). With 18-inch convex, cylindrical, axis vertical, her visual power (*vide* case 1) is doubled. She was also presbyopic with either eye to about a $\frac{1}{8}$ th.

With glasses corresponding to the above facts she reads No. 2 at 11 inches, without any asthenopic symptoms.

CASE V.—*Hypermetropic Astigmatism*.

In May last, I received a letter from a British physician in practice in South America, giving a very lucid description of his case, which I transcribe, as far as possible, in his own words :—

He is 30 years old, and had suffered from childhood from weak sight, and had never been able to read by artificial light anything but the largest print ; but up to within the last four years could read the *Times*, including advertisements, without glasses. Being obliged to write at night, he began to use slightly convex glasses, which enabled him to see more clearly, but always

* In experimenting on my own eyes with cylindrical lenses, I have observed the phenomena of astigmatism of a luminous point never appeared perfect, till a sufficient time was allowed for my accommodation to settle down into one constant condition.

magnified objects. Finding his sight became weaker, even by day, he gradually continued the use of glasses by day, and now cannot read even a leading article in the *Times* without them, and for not longer than twenty minutes at a time. On repeating the experiments of astigmatism, he obtained the following results:—

(1). A luminous point was converted into a vertical line by an 8-inch convex lens.

(2). At 5 yards he saw horizontal lines plainly, vertical ones not at all, merely a grey colour in their place. With a 6-inch convex lens, the definition of the lines was reversed.

He further on says:—"I had long known this peculiarity of my sight. . . . After half an hour's reading I am unable to distinguish m from n, or the Roman number III. from II.; and looking at our town clock from a distance, I can see the hands when they point to IX. or III., but not when they are directed towards XII. or VI. . . . All kinds of stuffs, cloth, &c., when striped vertically with black appear to me grey, unless the lines are far asunder, and then they dazzle me." He then very correctly diagnoses his case thus:—"From these observations I have concluded my refraction is natural in the vertical plane, but presbyopic (*should be 'hypermetropic'*) in the horizontal."

CASE VI.—*Compound Hypermetropic Astigmatism Limited to Left Eye.*—*Hypermetropia of Vertical Meridian* = $\frac{1}{14}$, *if Horizontal* = $\frac{1}{7}$. Vide similar case in Donders' Tract, p. 109.

James B., æt. 13, asthenopia for three years.

(1). RIGHT EYE.—Normal; reads 19 (Jäger) at 20 feet; glasses produce no effect.

(2). LEFT EYE.—Reads no type at 20 feet; with 16 convex 23, and at 3 feet horizontal lines much clearer than vertical ones.

Results after Paralysis of Accommodation by Atropine (gr. iv. ad. ʒj.)—Reads at 20 feet no type, with 14 convex 23. Appearances of a luminous point at a few feet: with 8 convex as a line pointing upwards and inwards ↖; with 14 convex as a line pointing upwards and outwards ↗; with 14 convex spherical and 14 convex cylindrical (axis upwards and inwards) the point appears round. With this last combination at a few feet horizontal, and vertical lines appear equally distinctly, and 22 is read well at 20 feet. With the ophthalmoscope the direct image is seen well without an eye-piece; the outer edge of the optic entrance is ragged and ill-defined, with a few granular pigment spots.

In this case I have reason to believe that a *third* meridian of astigmatism exists, but up to going to press I have not yet had time to investigate it.

Remarks on some Cases of Imperfect Development of the Uterus.—

By A. MEADOWS, M.D., M.R.C.P., Physician Accoucheur to the Out-Patients of the Lying-in Hospital.

CASES of arrested development, or complete absence of the uterus, are sufficiently rare, I think, to warrant me in making a few remarks upon the following examples which have occurred in my practice. I am led to do so for the reason chiefly that I believe the former condition is one not unfrequently overlooked.

The symptoms to which it gives rise are not usually very alarming; there may, indeed, be nothing to complain of, *but scanty menstruation and pain*, which, as it existed from the very commencement of that function, is regarded merely as a constitutional peculiarity, and so the local defect is undiscovered. Yet there are practical questions involved in a correct appreciation of this phenomenon, which are certainly worthy of consideration. This will be seen, I think, in the following cases:—

CASE I.—Miss W., age 23, consulted me in May, 1862. She was 23 years of age, and had enjoyed good health until about two years before, when she became subject to attacks, which appear, from the descriptions given, to have been epileptic; no cause could be assigned for their first appearance, but they had recurred ever since at intervals of one or two months. On further inquiry, I found that she had never menstruated. At the age of 15, symptoms occurred, such as pain in the loins and groin, nausea, and a feeling of general indisposition, which led her to suspect the approach of menstruation; but no discharge appeared. From that time to the period of my being consulted, she had, with tolerable regularity, a recurrence of these phenomena every month, with various sympathetic disturbances, and with increasing pain; but there had been no menstrual flow either from the vagina or any other outlet. She was a tall, well-made girl, having rather more than ordinary mammary development.

Feeling a suspicion that the symptoms complained of were probably due to some congenital defect of the generative organs, other than simple occlusion of the vagina or uterus, I requested an examination, which at once confirmed my suspicions, for I found that, though the vagina was perfectly formed, no trace whatever of the existence of any uterus could be found; there were, however, in the normal position of the uterus, two small soft, nipple-like elevations, rising about $\frac{1}{8}$ ths of an inch from the vaginal surface, which seemed to be simply folds of mucous membrane. Nothing could be felt beyond them, nor was there any opening either between them or elsewhere in the vagina, and there was certainly no evidence of anything like retained menstrual fluid.

I gave my opinion, therefore, that the amenorrhæa was due to complete absence of the uterus, and the epilepsy, probably, due to the amenorrhæa; that as it was not possible to cure the former, it was exceedingly doubtful whether much could be done towards relieving the latter. But, as an attempt in that direction, I ordered free purgation to be conducted during the occurrence of the monthly phenomena above alluded to, as a kind of vicarious menstruation, and the administration of sedatives to quiet the nervous system.

The *Second Case* was as follows:—

Mrs. B., age 27, consulted me in July, 1859. She had been married about seven months, and, though she had previously enjoyed pretty good health, she had been constantly ailing ever since. When 17 years old, she first experienced symptoms as if menstruation were about to begin; these in the main resembled those mentioned in the preceding case, and, like it, no discharge of any kind came. This state of things recurred every month, and became her accustomed habit. Strange to say, it did not seem in any way prejudicially to affect her health. She was well formed, though the breasts were somewhat small. After marriage, the pains greatly increased in severity, and the constitutional disturbance became very marked, she suffered a good deal from headache, and sexual intercourse was usually followed by severe pain in the groins and back.

These symptoms seemed to me to indicate some congenital defect in the generative system, and on examination it was discovered that the vagina was quite normal, but at its apex a small body, little bigger than a quill could be felt; it was rather hard, and projected into the vagina about half an inch. A small dimple-like depression could be felt at its lower part, but the ordinary uterine sound would not penetrate it; a very fine elastic bougie was then tried, and this, without difficulty, passed to what was evidently the fundus of this diminutive little organ, giving a measurement of barely $\frac{3}{4}$ ths of an inch. There was no fluid in this cavity, which was no doubt that of the uterus, arrested in its development, when apparently not quite half grown.

The treatment adopted was merely palliative.

The *Third Case* occurred in the person of Mrs. D., age 36, who consulted me in July, 1863. She had been married seven years, but had no family; and it was for this chiefly that my opinion was sought. She stated that menstruation began when she was 16, as a mere "show," but attended with a good deal of pain. She had, however, enjoyed tolerable health, except on one occasion, when she had a sharp attack of inflammation, the sequel to an operation, which, from the account given, appears to have been division of the cervix uteri. Menstruation had from the first been of the same character, exceedingly scanty, consisting sometimes of only a few drops, and always attended by severe pain. There was no absence of sexual feeling, and the mammary gland was fairly developed.

On examination, I found the cervix uteri very small, and completely divided transversely, each lip being about the size of the tip of the forefinger. The sound passed readily into the cavity, but it only recorded an inch as the extreme length of the organ.

The case was pronounced one of defective development of the uterus, and as such declared to be, with its accompanying sterility, incurable.

I have seen one other case of complete absence of the uterus, which was discovered in a *post-mortem* examination I made upon a foetus still-born at full time. In this case the ovaries were intact, and a sort of Fallopian tube existed; but no trace whatever of any uterus could be discovered.

Remarks.—Now, there are several points of interest in the consideration of such cases as these. There is the legal, the social, the pathological, and the therapeutical aspect, and the question of diagnosis also, which, though generally not a matter of much, if any, difficulty, is I believe often the subject of error.

With reference to the *legal* aspect of the case; though the *Canon* law evidently anticipates that, inasmuch as marriage was designed first for the procreation of children, any malformation or congenital defect which, at the time of the marriage contract, rendered such a consummation physically impossible, should, *ipso facto*, be a reasonable ground for making it null and void; yet, in practice, this is not the case. All that the law requires—and it is painfully instructive, methinks—is, that there should be *capacity for sexual intercourse*, irrespective of the condition of the procreative faculty: as if the former, and not the latter, were the important object in the eye of the law—a lamentable proof of the tendency of our marriage laws, with which the proceedings in the Divorce Court are in sad conformity.

Socially, however, the question has other bearings; for it cannot be denied that—in many cases, at least—the knowledge by the husband of the existence of such a defect in the wife would lead to very unhappy consequences; and the duty, therefore, of the medical adviser, in those cases where such a defect is clearly demonstrated before marriage, is one of *caution* against the evils which marriage might entail. In the first case I have mentioned, marriage was actually in contemplation at the time of my being consulted, and, knowing the troubles which do sometimes result from sterility, I thought it well to caution the mother against such an event, with what result I cannot say. It is no doubt hard to interrupt a union on such grounds, but this is a question only for those who are parties to it.

Regarded *pathologically*, we can, of course, know but little of the actual process by which the uterus is excluded from the ordinary developmental *rôle*. In fact, we have no clue whatever to such an occurrence. We know that this organ is normally developed from the union of Muller's ducts. Why this union is sometimes prevented, and what becomes of the parts in that case, we know not. In those cases where the uterus does exist, but is much undersized, we are still equally in the dark.

This much, however, we learn, I think, from the cases here recorded—namely, that the uterus bears no part in the production of sexual desires; nor has it anything to do with the for-

mation of the sexual characteristics. These latter existed in their full integrity in the case where no uterus was found, and they certainly were not diminished in those cases where the uterus was but imperfectly developed; while sexual desire, or rather the procreative desire, was strong, rather than otherwise. In fact, physiologically speaking, the uterus is merely an appendage to the ovaries, not the ovaries to the uterus. This observation is, I believe, contrary to the usually received opinion; but of its accuracy there can be no doubt. The apparent discrepancy is, I think, to be explained by the fact that, *generally*, where the uterus is either absent or arrested in its growth, the ovaries are affected in a similar way; and then, of course, sexual desire and sexual characters are absent or diminished. In these cases, however, such was not the case; and this is, I think, attested by the fact that ovarian activity, and its consequent sympathetic disturbances was made evident at every monthly period.

With respect to *diagnosis*, as a rule, this is tolerably easy in those cases where, together with the absence of the uterus, there is also absence or arrested development of the ovaries; for not only is there amenorrhæa, but the characters of the female sex are wanting to a greater or less degree; and sexual desire is then also, in part or altogether, absent. But where the ovaries are intact, then the symptoms which set in at puberty resemble very closely those where the os uteri or vagina is occluded and menstrual fluid is being secreted but finds no outlet. It is very important, however, to distinguish between these two conditions, because the attempt to cure by the knife, or trocar, which, in the one case—that of retained secretion—would be perfectly justifiable, would in the other be as certainly fatal. As a rule, both the local and general symptoms are far less severe in the latter than in the former.

But it is only by a vaginal examination that the real condition of things can be determined. By this means we shall find, either, (1) that the vagina is completely closed (the menstrual fluid being retained behind the hymen): or, (2) the vagina is normal, but the os uteri is closed, and the uterus is felt to be enlarged, with the cervix spread out, soft, tense, and elastic; or (3) a small body the size of a quill may be found at the top of the vagina, projecting into it about a quarter of an inch; or (4) nothing whatever of the nature of a uterus can be made out; and the roof of the vagina is smooth and uniform, without so much as a nodular projection. These are generally the conditions which will be met with, and the symptoms they occasion may be read in the cases detailed.

Lastly, with regard to *treatment*, what can we do? Supposing there is neither uterus nor ovaries, or only a rudimentary condition of both, the answer is obvious—nothing. If the

ovaries are intact, and the uterus present but rudimentary, have we any better hope of success? Here also, I fear the chances of any successful treatment are but slender, at least if the object be to remedy the abnormal condition of the parts. So far as I am aware, the only suggestion which has ever been attempted for the cure of this state of things originated with Dr. Simpson, who very ingeniously applied a small intra-uterine galvanic pessary, the galvanic character being given to it by the stem which was inserted into the uterine cavity being composed partly of copper, and partly of zinc. Dr. Simpson is said to have had good success with this instrument, the uterus developing under its influence, and the amenorrhœa being cured.

I must confess, however, that my experience has by no means tallied with this. I have used the so-called galvanic pessaries several times, but I have always found great local irritation result from them, such as compelled me to desist, and I have never yet seen any good follow. I fear, therefore, our chances of forcing development upon the uterus by any such means, are about as hopeful as if we administered diuretics for the purpose of stimulating the growth of an undeveloped kidney.

What then can be done? much, I believe of a palliative character. In the first case here recorded where there was complete absence of the uterus, so far at least as could be discovered, the symptoms resulting from the amenorrhœa had gone on with increasing severity, till the effect upon the nervous system was to produce epileptic seizures. All this seems to show, that, as a general rule, during the 30 years of ovarian activity, there is a positive necessity for some such relief to the system as is supplied by ordinary menstruation. What particular form of malady the absence of this relief may assume, it is not possible to predicate; and, naturally, the treatment required must vary with the phenomena presented. No doubt sedatives to quiet the nervous system, and allay the pain which always results where ovarian excitement exists without the menstrual flow, will be of great service, and the more so if they are of that kind which partakes as well of the antispasmodic character; ether, musk, gum-camphor, chloroform, valerian, henbane, sumbul, and the like, are those to which I should mostly trust. The warm bath is also a valuable adjunct.

By far the most important treatment, however, is that which aims at establishing a sort of vicarious menstruation; which tries, in short, to relieve the system of that which ordinary menstruation effects, and no means seems so applicable for this purpose as simple purgation, choosing those purgatives which act chiefly on the *upper* bowel. Of course it only requires to be enforced at the usual monthly crisis, when ovarian excitement is present. A dose of jalap, senna, or Epsom salts, every morn-

ing fasting, will then not only be a great relief, but probably prevent the accession of more serious, or more unpleasant symptoms.

In conclusion, I would venture to offer one word of caution. I have seen, on more than one occasion, cases of the same kind as those detailed above, whose prominent symptoms were painful monthly periods, with little or no menstrual flow. With more zeal than discrimination, these have been, often for months together, treated with iron in various forms, combined occasionally with aloes, with, as might be anticipated, rather more harm than good. No treatment could be more unfortunately selected; for instead of sluggishness, which these remedies were intended to correct, we have here undue activity; undue, because, by the error in development, the ovarian activity finds no uterine sympathy, and is left, as it were, to prey upon itself. The folly, therefore, of administering iron and aloes, with the certainty of increasing local congestion, is at once apparent, and the lesson taught by it is not to treat blindly and by routine, but where such phenomena occur, to be quite sure that there is no structural peculiarity; and from my own experience, I believe, it will be found that amenorrhœa, the result of defective development of the uterus, is by no means so rare as is commonly supposed.

Surgical Cases at the London Hospital. Reported by C. F. MAUNDER, Esq., F.R.C.S., Senior Assistant-Surgeon, and Demonstrator of Operative Surgery, London Hospital; formerly Demonstrator of Anatomy at Guy's Hospital.

Epithelioma on Vulva.

E. C., æt. 26. A healthy-looking married woman entered the hospital for the second time to-day, November 3rd, 1863, under the care of Mr. Curling, the subject of a small tumour of the left nympha.

History.—About two years since she accidentally discovered a small lump on the left nympha about the size of a pea; it remained quiescent for some time, and at length assumed the dimensions of a hazel nut, attended by pricking, shooting pains, and a sanious discharge. In July, 1863, the growth was abscised, and the wound soon healed. Five weeks from the date of operation the scar felt hard and painful, and a tumour similar to the first was gradually developed; at present there is a circumscribed, indurated, cupped tumour on the remains of the left nympha, encroaching upon the clitoris and labium majus, the seat of repeated darting pains. The growth has the diameter

of a florin, discharges a sanious fluid of offensive odour from an irregular surface, with a hard, elevated, irregular margin. It bleeds freely. There is an enlarged hard gland in the left groin of the presence of which the patient is not aware.

Mr. Curling removed the growth, cutting wide of it, and also the enlarged gland. On examination with the microscope by Mr. Little, both the growth and the gland were found to contain cells characteristic of epithelioma.

Indurated Chancre on Lower Lip.

C. J., male, æt. 55 years, came under Mr. Maunder's observation on November 3rd, 1863. He stated that he had bitten his lip about a month since, and that the lip and chin had assumed gradually their present appearance. On removing a piece of rag from the mouth, the left side of the lower lip and the left sub-maxillary region are much swelled, especially the latter, which is also red and painful on pressure; the free margin and mucous lining of the lip present a slightly elevated, rounded swelling of the diameter of a shilling, ulcerating where it comes in contact with the teeth, but only just moist elsewhere. To the touch it is firm only, and not absolutely indurated when compressed by the finger and thumb, although the hardness can be then defined with tolerable distinctness; on further investigation the patient is found to be the subject of a squamous eruption on the trunk and extremities. The case is believed to be one both of primary and secondary syphilis, and the patient being married, it is deemed undesirable to investigate the source of the disease. Ordered black wash to the lip, and five grains of blue pill night and morning.

December 8th.—The ulceration, induration, and swelling have gradually subsided, leaving a small firm cicatrix on the lip, an enlarged hard painless gland in the left sub-maxillary region, a pale eruption on the legs, and a still paler on the trunk and upper extremities; and thus confirming the diagnosis.

Indurated Chancre on Penis.

G. W., æt. 10, came under Mr. Maunder's care on November 24th, 1863. The mother of the patient believes that the boy has been ill about a fortnight, and that he probably contracted his disease from a school water-closet. He is a pale, sickly looking lad, the subject of a temporary phymosis and of a swelling opposite to the corona, which, when felt through the integument, is very indurated, and distinctly circumscribed, but scarcely painful; there is a very slight thin discharge through the orifice of the prepuce, and a characteristic adenopathy in both groins. Ordered three grains of grey powder,

and ten of peroxide of iron twice daily, the prepuce to be washed out with black wash.

December 8th.—The patient has not appeared at the hospital since his first visit, and to-day the mother says he bleeds at the mouth, and the saliva flows therefrom, also he takes food with great difficulty, and complains of pain about his jaws; his breath smells offensively. Ordered an alum gargle, chlorate of potash, and dec. of bark, in form of mixture. To omit the powders, and to bring the boy to the hospital.

December 11th.—The boy is better; saliva flows from his mouth in small quantity; tongue is coated with thick, dirty white fur, and is swollen, gums congested and spongy. The induration on penis is diminished, and the prepuce can be withdrawn so as to expose at the corona an induration of the diameter of a sixpence, having a surface just moist. Ordered to continue the medicaments, with the addition of iodide of potassium to the mixture.

Remarks.—Instances of indurated chancre and of epithelioma occasionally occur in peculiar localities and under unusual circumstances, rendering a careful investigation necessary, in order to avoid errors in diagnosis. The cases of the female and elder male are of this kind, and are well worthy of comparison.

The female is young and of healthy aspect, and of an age (26) at which epithelioma is rarely met with, while the site of the growth (the vulva) would, *à priori*, lead one to suspect the probable presence of a chancre; the mere presence, too, of an enlarged, indurated, painless gland in the corresponding groin will not at once solve the difficulty. The history of the case associated with present symptoms determines the nature of the malady. The growth has recurred on its original site after removal by the knife, a fact indicative of malignant disease, but, contrary to experience concerning indurated chancre, the latter never occurring twice in the same person. (A case, I believe, has been lately recorded by Ricord, in which an indurated chancre and its sequelæ were observed for the second time in a male with an interval of twenty years from the first attack.) Probably during this period the whole of the diseased tissues of his body had been renewed, and the individual was rendered liable to those diseases which are only repeated under rare and similar conditions. The state of the adjacent glands will aid the diagnosis much, if it be borne in mind that in a case of epithelioma these organs are not perceptibly enlarged usually until after the lapse of at least twelve *months* from the date of its observation (in the case of the female, Mr. Curling remarked no glandular swelling when the first operation was performed), while in the case of indurated chancre one or more glands enlarge usually before the expiration of twelve *days*.

The adult male is the subject of a hard sore on one side of

the lower lip, at an age (55) when, and on a site where, an epithelioma is not uncommonly observed; but associated with it are a sub-maxillary adenitis and a squamous eruption. The glandular enlargement beneath the jaw is in accordance with the law relating to the sequelæ of indurated chancre, but the attendant swelling and inflammation of the soft parts around the gland itself are exceptional, and must be regarded as accidental, and consequent on the undue irritation to which the sore has been subjected by contact with the teeth, and also to its peculiar locality—the lip.

These exceptional signs of inflammation around glands associated with indurated chancre are rather regular than exceptional when the sore is seated on the lips, and for reasons just assigned, but suppuration rarely occurs. The specific induration and isolation from surrounding structures are rarely so decided upon the lip as at the corona penis. The squamous eruption and the influence exerted by the remedies employed readily determined the diagnosis in this case.

The younger male is the subject of a typical indurated chancre and its attendant inguinal adenopathy.

DIFFERENTIAL DIAGNOSIS.

Epithelioma.

Indurated Chancre.

Generally recurs after operation—usually observed after the middle period of life—surface and margin more or less hard, irregular, minutely nodulated, and sooner or later attended by senious and offensive discharge—attended by an adenopathy after the lapse of *months*—Painful.

Occurs only once in the same person (one exception has been recorded), and at any period of life—surface more or less smooth, and only just moist—attended by an adenopathy after the lapse of *days*—Painless.

On the Advantages Derivable to the Medical Profession and to the Public from the Establishment of Village Hospitals. By ALBERT NAPPER, Esq., M.R.C.S., &c., Surgeon to the Cranley (Surrey) Village Hospital.*

OF all the charitable institutions of which the country has just reason to be proud, there are none which surpass, in general usefulness, in public appreciation, or in the noble scale of endow-

* We regret that want of space compels us to postpone some very useful "Directions upon the Best Method of Establishing a Village Hospital," by the author of this communication.—ED. "Medical Mirror."

ments, our public hospitals appropriated to the reception of the sick and maimed. About a century and a half has elapsed from the date of their first institution in London on a comparatively small scale; and so highly have they stood in public estimation, as not only to have increased with the progressive development of civilization, but at the present time to have attained a standard equalled, probably, by no other country. It is computed that our hospitals are capable of receiving at least 21,000 inmates, at a cost of upwards of £600,000 per annum; but, large as these figures may appear, it falls far short of the requirements of the country. Hitherto they have been restricted to the metropolis and larger towns, where only the funds necessary for their support could be raised, or a competent medical staff procured; and although their beneficent influence has been widely diffused, and their benefits freely and gladly accepted by the rural districts, they fail to meet the requirements of the rustic and mining population in these times, when machinery has become so generally in use. A very short experience of country medical practice must suffice to show the impossibility of rendering efficient aid in urgent cases of accident or disease, with no other accommodation than that afforded by the, too frequently, miserable abodes of the poor. The nearest hospital is many miles distant, the patient too exhausted to bear a long journey, and the relatives nearly always reluctant to have him removed to a distance so great as to preclude the possibility of frequent visits.

Labouring under these disadvantages, can it be a matter of surprise that the best of surgeons are frequently unable to render efficient aid, and that the patient lingers on in misery, or suffers from deformity, alike injurious to himself and to the reputation of his medical attendant? This is no over-drawn picture, as witnessed in my own experience, and which first led me to consider how a practical remedy could be applied; and, looking upon it as but a matter of degree, it appeared to me that it was only required to reduce the scale of the institution by establishing a hospital on a small and inexpensive plan, commensurate with the capabilities of the staff, to secure, if not all that could be desired, at least the means of alleviating many of the evils and inconveniences so severely felt; and to this end, through the liberality and cordial assistance of the rector of the parish, a cottage was provided, which, in October, 1859, was opened as a "village hospital."

Whether the above-named desideratum is to be attained through this, or by other means, time only can determine; but the wide-spread interest the subject has awakened, the numerous applications for particulars, and the fact of many more having already been established, bears ample testimony to the urgency of the need. The public appear to be labouring under the delusion that the majority of cases admitted into a hospital require,

for their successful treatment, the united deliberations of a highly skilled medical and surgical staff, whereas, with an occasional rare exception, they may be equally well treated by any ordinarily well-qualified surgeon, aided by the advantages of good nursing, generous diet, and comfortable lodging; nor are these advantages appreciably enhanced by the costliness of the building, the completeness of its details, or the elegance of the attendants. The rustic labourer feels more at ease in lodgings similar to his own, and is often prejudicially influenced by the bustle and excitement of a large hospital. As I have before observed, he is generally averse to the removal to a large and distant hospital, against which both he and his friends entertain strong prejudices, and, as a necessary consequence, numerous cases adapted to hospital treatment remain for years unrelieved; but bring a hospital home to him, where friends and relations can pay an occasional visit, and he has no hesitation in availing himself of the boon. Although the prime object and intention of hospitals has ever been the alleviation of the sufferings of the poor, it must also be admitted they have conferred no trifling benefits on the higher classes of society, not only by affording them a means of providing for the immediate medical requirements of their dependants, but also in securing for themselves a class of professional advisers whose position of hospital physician or surgeon is always considered a sufficient guarantee of high professional attainments. So much truth is there in this, that, in the absence of any such means of affording proof of his ability, the country surgeon is too frequently regarded with distrust, involving the higher class of patients in heavy expenses and much inconvenience in obtaining distant professional assistance, which, did they but know it, might have been had, of equal value, at hand.

To the medical practitioner, little need be said to prove the value of these institutions. To every surgeon it is a source of pleasure and gratification to be enabled to render effectual aid and relief in cases of unwonted severity; and whilst the village hospital thus supplies his need, it farther affords him the means of maintaining and exhibiting his skill, and of gaining, by fair and honourable means, the respect and confidence of his neighbourhood.

The principle upon which the village hospital is conducted differs somewhat from that of other similar institutions, inasmuch as every patient is expected to pay a small weekly sum towards his maintenance—a plan that has been found to work remarkably well, realizing a sum equal to about one-third the total expenditure of the hospital. It has been thought by some that this would operate to the exclusion of some destitute objects of charity; but, practically, this is not the result. Friends, relatives, or employers are ever ready to provide the means when under the

influence of anxiety and fear; and, as the required payment at the Cranley Hospital never exceeds five shillings per week, it is generally less than it would cost to keep the patient at home; and, in the case of destitute persons, the amount is always guaranteed by the relieving officer of the union.

Accidents and cases of emergency are at all times admitted without orders; but all other applicants must be recommended by a subscriber. The hospital is mainly supported by donations and small annual subscriptions, but the number of beds being necessarily small, subscribers, whilst recommending, are not entitled to order the admission of patients; and, as a standing rule, *such only are admitted as cannot be efficiently treated at their own homes*, whilst infectious, incurable, and consumptive diseases are excluded. With these restrictions, it has been found that the appropriation of one bed to each thousand of the population of the district will be sufficient; so that a hospital of six beds, in an agricultural district, will generally embrace a sufficiently large area.

It has been suggested that the designation of "district," in the place of "village," should be attached to the hospital; but to this I object, on the ground of its implying an institution on a larger scale, and embracing a more extended sphere, neither of which can I think be desirable. So long as the hospital is kept within the limits of the capabilities of a single nurse (with occasional help), the cost of it is marvellously small, and the professional attendance no undue burden to the medical officer; but a single step beyond this necessitates an enormous increase of expenditure, and tends to defeat the object aimed at, of bringing the hospital home to the doors of the poor.

An important consideration in the establishment of a village hospital is the arrangement for the medical attendance. At the meeting of the British Medical Association, held at Bristol, in August, this subject was discussed in a sectional committee appointed for the purpose, and the prevailing opinion appeared to be that one surgeon only should take the entire charge of it, whilst the whole medical community of the district should be invited to co-operate, by rendering assistance in any cases in which they might be interested. Thus, if a practitioner of the neighbourhood had a case for admission, he should by courtesy be privileged to visit his patient, and advise, with the medical officer, respecting the mode of treatment to be followed; and if a case for operation, he should have the option of performing it himself, or leaving to the care of the hospital attendant. By this means the hospital is made subservient to the interests of the whole medical body of the district. Another question of considerable importance, also, for some time occupied the attention of the committee, that of the gratuitous nature of the services rendered to these institutions by the medical officers.

To enter fully into this subject would occupy more time and space than I have at my disposal, but I may shortly state that, after fully discussing the matter, the committee came to the conclusion, "that, whilst fully recognising the principle of due compensation for professional services, it could not, under existing circumstances, see its way so clearly as to recommend its adoption in this instance." If gratuitous services are under any circumstances justifiable, I must consider this as a case in point. I find by analysis of the cases treated in the Cranley village hospital, during the first four years, just 100 in number; 77 were parish paupers, who were *virtually* being attended by the respective medical officers, gratuitously; 7 were persons totally without means of paying, and the remaining 16 were all in humble circumstances. Of the 77 paupers, 10 were cases of accident and operation, for which the Board of Guardians paid the usual extra fees, amounting to £36. (It is made a condition of admission, fully acquiesced in by the Poor Law Guardians, that the extra fee due for any such case of a pauper admitted shall be paid to the surgeon who would otherwise have attended it.)

Assuming that hospital accommodation is required for one in every thousand of the population of the United Kingdom, amounting to twenty-nine millions, the number of beds required would be twenty-nine thousand, whereas at present it does not exceed twenty-one thousand. There are eight hundred and twenty-six Poor-law Union districts in the United Kingdom, and if each contained but one village hospital, it would leave but a small number to be made up by the towns, many of which must be capable of supporting an institution of from fifteen to twenty beds, more particularly if the principle of requiring a small payment from each patient be acted upon. It is well known that numerous cases admitted into the hospitals, and more especially to those supported by voluntary subscriptions, are persons capable of obtaining medical attendance, without having recourse to charity, and who are granted admission more with a view of gratifying the subscriber than of benefiting the patient. Of all the ruinous evils to which hospitals are exposed, this is one of the greatest, and without impairing their efficiency, there could be no more effectual remedy than requiring from each patient a small weekly payment.

Before concluding my paper, I must earnestly appeal to my brother practitioners of the provinces for their co-operation in carrying out a scheme, the full advantages of which can only be secured by their cordial approbation and support; and bearing in mind the mutual confidence, the friendly aid and assistance, and the relief from anxiety in many cases of difficulty, that will ensue, I venture to hope my appeal will not be made in vain.

REVIEWS AND NOTICES OF BOOKS.

The Science and Practice of Medicine. By WILLIAM AITKEN, M.D., Edin., Professor of Pathology in the Army Medical School, &c., &c. Two vols., 8vo., pp. 727 and 1095, second edition. London: Griffin and Co., 1863.

FIRST NOTICE.

SHORTLY before the period at which it will be requisite for the present number of the "Medical Mirror" to go to press, we have had put into our hands the second edition of this excellent work. The greater proportion of the 1820 pages contained in it have been entirely revised and re-written by Dr. Aitken, and the descriptions of many diseases, omitted in the first edition, are introduced in this one.

We regret that the circumstance just referred to prevents us from giving an immediate and full notice of these standard volumes on medicine; but we must rest contented with furnishing the reader with a brief summary of their contents, leaving a detailed analysis for a future notice.

Next to the excellent manner in which the typography has been executed by the printers, one of the first things which must strike the eye,—an organ readily sensitive to external impressions,—is the peculiar tint of the paper upon which the work is printed. This is of a decided yellowish tone, which Dr. Aitken has adopted in consequence of certain statements contained in a recent volume of the "Ophthalmic Hospital Reports," where the fact is demonstrated by cogent proofs that this colour is the best adapted for the paper upon which books are printed, as it is less fatiguing to the eye than plain white paper. This point may appear to many to be of only slight importance; but if any one, desirous of testing the value of it, will give a continuous perusal of two hours to the work under notice, and sit down for a similar period to any book printed on ordinary paper, with the same sized type as that used in Dr. Aitken's work, he will acknowledge the utility of the innovation to a "reading man."

With respect to the majority of diseases, the author follows, for the most part, the nomenclature and classification used in the Registrar-General's Report, and by the Army Medical Department, principally:—

"Because it is at present practically the most useful nosology; because its *nomenclature* has been agreed upon as that to be used in every country of Europe; because it has been ordained to be used by the War Office authorities of our own country in the Medical Returns of Her Majesty's British and

Indian armies ; because its practical bearings tend to elucidate great and comprehensive questions connected with public health, as well as many practical questions relating to diseases ; because it tends to demonstrate on a large scale conditions that are injurious and fatal to the life of man ; and because, by thus pointing out such conditions, it contributes to remove the evils which tend to shorten human life in town and country, and impair the strength of our armies and our fleet." Vol. i., p. 172.

Yet, with all these advantages, there are some diseases, such as rheumatism, chronic Bright's disease, and diabetes mellitus, which the author regards as wrongly classified.

The first ten chapters treat of the elements of General Pathology. The writer next gives a short account of the principal modern systems of nosology which have been suggested by various writers since the once famous, but now obsolete, system of nomenclature, introduced by Dr. Cullen in 1792.

Upwards of eight hundred pages are devoted to a description of the nature of diseases, and special pathology and therapeutics. The various affections of the human body are arranged under the five different classes employed in the nosology of Dr. Farr :—

Class I.—Zymotic Diseases ; *Zymotici*.

Class II.—Constitutional Diseases ; *Cachectici*.

Class III.—Diseases in the course of which the Lesions tend to be localised ; *Monorganici*.

Class IV.—Developmental Diseases ; *Metamorphici*.

Class V.—Lesions from Violence tending to sudden death ; *Thanatici*.

The reasons why Dr. Aitken has adopted this arrangement, notwithstanding the circumstance of his considering it faulty in some points, have been already stated.

The last portion of the work is upon the interesting subject of Medical Geography, or the Geographical Distribution of Health and Disease, which has not yet obtained the attention to which its importance entitles it.

The work is supplied with pictorial illustrations when these are serviceable in making the text more easily understood. Diagrams showing the typical ranges of temperature in febrile diseases are also introduced, for the first time, in a text-book, as the author observes in his preface ; and an interesting chart of the Geographical Distribution of Health and Disease, reduced in scale from that contained in Mr. Keith Johnston's "Physical Atlas," is inserted in the second volume.

The Surgical Diseases of Children. By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital. Post 8vo., pp. 145.
London : Churchill and Sons, 1863.

IN this small but very instructive book, Mr. Bryant reproduces the Lettsomian Lectures on Surgery, delivered by him before the Medical Society of London in the last session.

In the short space of three evenings, which is all the time that can be devoted, without encroachment upon the ordinary meetings, to these lectures, two courses of which are given annually upon Medicine, Surgery, or collateral subjects, in the months of November and March respectively, it is, of course, impossible to dwell, even for a few minutes, upon every feature of interest, in relation to so widely comprehensive a subject as that selected by the author.

He has, however, successfully surmounted this difficulty by confining his remarks to certain salient points, and contenting himself with a passing reference to his own or other authors' printed observations upon those affections which he has been compelled, by the exigencies of the situation, to leave almost altogether untouched.

He has, by this judicious arrangement, been enabled to lay greater stress upon the views which he especially desired to bring under the notice of the Society, respecting the main points of difference observed between certain diseases in the child and in the adult, and the fact that these differences are chiefly due to the circumstance that in childhood the nutritive functions are devoted to the maintenance of the growth and increase of the body, whilst in adult life the reparation of the loss occasioned by the continuous disintegration of the tissues is principally provided for. These differences between the physiological and pathological processes, witnessed at various periods of existence, are very clearly demonstrated by descriptions of cases which have occurred in Mr. Bryant's practice, and by reference to the published opinions of other surgeons.

The chief affections which the author has discussed separately are:—Hare-lip; malformations and surgical diseases of the anus and lower bowel; tracheotomy; nævus; affections of the urino-genital organs; diseases peculiar to the osseous system; and the different kinds of tumours situated in various parts of the body.

Each of these comes in for as much attention as could be given to it in the limited time at Mr. Bryant's disposal, and the work will be found well worthy of perusal, whether in reference to them, or to the general points which are involved in Mr. Bryant's lectures.

Elements of the Anatomy and Diseases of the Teeth. By H. T. KEMPTON, F.L.S., Licentiate in Dental Surgery, Dental Surgeon to the National Dental Hospital, &c. 8vo., pp. 173. London: Hardwicke, 1863.

MR. KEMPTON'S treatise, which is the most recent English book upon this subject, having been published within the last two months, will be found very useful. Without going too deeply

into details interesting only to the specialist, Mr. Kempton has produced a work which will be of great value to students in dentistry and contains all that a medical practitioner can require to know for the proper management of any ordinary cases of dental disease, not calling for the intervention of a dentist, which may come under his care.

No department of surgery has been more infested with pretenders, whose ignorance is only on a par with their impudence, than dentistry, and it is to such works as that under notice that we must look for a remedy of the evil. In proportion to the increase of knowledge, through the publication of text-books, the profession will give dentistry the attention which the magnitude of the subject demands, and the public, acquiring confidence in educated men, and learning to discriminate between them and the advertising quacks, intent upon nothing but making money out of others' misfortunes, will be proportionately benefited. This has been the case with respect to the branches of the oculist and aurist, and will, doubtless, follow in that of the dentist.

The first sixty pages of Mr. Kempton's book, which contains some useful plates illustrative of the text, are occupied with such a description of the anatomy and physiology of the teeth and the surrounding structures as is necessary before going into details respecting the affections of these parts, which are discussed in the remainder of the work.

From the circumstance of most of the permanent teeth being larger than those in the first set, and also of their being placed a little behind them during their growth, so that they are consequently confined within the segment of a smaller circle, as was first pointed out by Mr. Bell, it is evident that, as they approach towards their full development, the jaw must become much crowded. If the growth of the maxillary bones has not been commensurate with the necessity for the accommodation of the second set of teeth, or if the temporary teeth have not become loosened and gradually removed, so as to make room for their successors, great irregularity of the teeth, causing more or less permanent deformity of the mouth, and pain to the little patient, is produced. It is very desirable at this period, from the sixth to the twelfth year of life, that an occasional examination of the child's mouth should be made by some experienced practitioner, in order that nature may be assisted if, for either of the reasons just given, there is more than ordinary difficulty in the eruption of the second set of teeth. If this plan were adopted, Mr. Kempton states, at page 69, that—

"We should seldom meet with an irregular set of teeth, and in nearly every instance it would be possible to preserve the six anterior teeth in the regular arch of the jaw."

Reckless and wholesale extraction of the teeth in these cases

is strongly reprobated by Mr. Kempton, as is also the practice, recommended by some writers, of passing a fine file in between the teeth when they are only slightly crowded, in order that by the removal of a small quantity of enamel on the sides of each tooth, an extra degree of room may be obtained. Instead of doing this, it is far better, as the author observes, to sacrifice one or two teeth, so as to procure the necessary additional space, than to damage the protecting layer upon all of the teeth, and thus render them very liable to subsequent decay. Generally speaking, the teeth which it would be best to extract, to allow of the proper eruption of the others, would be a bicuspid on each side. Sometimes, however, it happens in this class of cases that the first molar is already the subject of caries, in which case—

“If the want of space is only slight, it might be better to remove this tooth in preference to either of the bicuspids, if those teeth were perfectly sound. No fixed rule, however, can be laid down in these cases, and it must be left to the judgment of the operator which plan of treatment should be pursued in each particular case, always bearing in mind that the *vis medicatrix nature* in matters relating to irregularity of the teeth is very great, and that, when left to herself, nature will frequently remedy any slight defect of the kind, without the necessity of any operation.”

When very marked irregularity of the teeth is present, a special apparatus is required, but its manufacture and application come under the scope only of a qualified dental surgeon.

In speaking of the frequency of caries, the author notes the fact that out of 3,000 cases of extraction of the teeth at the Middlesex Hospital no less than 2,508 were on account of this disease. He recommends proper attention to be paid to constitutional, as well as to local, treatment in most cases.

The concluding chapter is upon the use of anæsthetics in dentistry. Mr. Kempton very sensibly advises that, in every instance where it is proposed to administer chloroform, the usual medical attendant, who must necessarily be best acquainted with the constitution of the patient, ought to be previously consulted as to the advisability of its administration, and that the chloroform should be administered by a medical man, so as to enable the dentist to give his whole attention to the operation which he has to perform.

On Australasian Climates, and their Influence in the Prevention and Arrest of Pulmonary Consumption. By S. DOUGAN BIRD, M.D., Physician to the Benevolent Asylum, Melbourne. Pp. 168, 8vo. London: Longman and Co., 1863.

THE author has been apparently actuated as much by a sense of duty as of pleasure in directing attention to the health-restoring powers of the climates of our colonies in the southern hemisphere, especially in the matter of pulmonary consumption;

for he describes himself as a *poitrinaire*, whose case at home was given up as hardly admitting of a cure, except by a radical change of constitution. This, he thinks, was accomplished after he had completed a long voyage, and resided a short time in the colony of Victoria, for he says that in less than three months from his landing, he had gained 16 lbs. in weight, had lost all his symptoms, and that he has remained in perfect health ever since. A glance at his statistics would induce us to think he is justified in looking upon the Australasian climates generally as, above all others known, calculated to exercise the restorative and alterative effect so absolutely necessary for the cure of consumption, or at any rate the elimination of the tubercular cachexia: these climates being characterised by mildness and equability of temperature, an elastic atmosphere, generally dry, but, where moist, as in New Zealand, still containing a large proportion of ozone, and eminently marine; on the low grounds, for the most part free from frost and fogs; a clear, sunny atmosphere, almost throughout the year; winds never bitterly cold and humid; in the winter the northerly warm enough, in the summer the southerly cool enough, to temper the air agreeably; hot winds and tropical storms prevail at times, but never last long, and are in no way prejudicial to health; at the same time there are no very high mountain ranges to prevent the marine ozoniferous air from penetrating considerable distances into the interior from the seashore. In these various conditions the climate presents a decided contrast with that of the northern hemisphere. He looks upon the colony of Victoria as possessing among the Australasian climates a medium character, it being cooler than South Australia, New South Wales, or Queensland, warmer and drier than Tasmania or New Zealand; and its capital, Melbourne, as being, taking all the seasons of the year, better suited for the cure of consumption than any other part of the world; possessing this great advantage, that it has a smaller mean annual range of temperature *at a warm level* than any place to which invalids are sent, while its mean yearly temperature may be compared to that of Pau, Montpellier, and Nice. The contrast is very striking when we find that at home 40 per cent. of the total number of deaths are from diseases of the respiratory organs, but in Victoria only 15 per cent. arise from these causes; again, from tubercular diseases generally the deaths average only 12 per cent.; from pulmonary consumption the mortality is about 7 per cent., and in the country districts it is probably not more than 5 per cent. Our author's view of the effect of the climate is, that by its ozoniferous, marine, tonic, generally dry, and always unirritating air, warm cloudless sun, and other advantages, it so changes the character of the human constitution as to enable it to shake off the tuberculous cachexia altogether.

While speaking so highly of the colony with which he is most familiar, and stating that, within certain limits, it contains all the varieties of atmosphere, suitable to the different forms of pulmonary irritation, such as the dry, moist, tonic, soothing, exciting, and relaxing, the author does not neglect to notice the especial advantages of other colonies for remedying certain morbid states of the respiratory organs. Thus he says that South Australia is well adapted for persons who require a warm, dry, stimulating air, while those who have sanguineous or nervous temperaments, and irritable mucous membranes, should go to the interior of the continent, or even to those parts of New Zealand which are moist and somewhat relaxing, but warm. Tasmania, it seems, is tonic, and well suited for individuals who have been injuriously affected by the climate of India or other very hot countries. The winter climate, *par excellence*, is that of Queensland, where, in the vicinity of the coast, there is a temperature of 62° or 63°, higher even than that of Madeira, an air soft and soothing, without being relaxing, and sunny, brilliant weather. The author gives some instances of others besides himself who have entirely recovered from consumption, or been enabled, with due precautions, to carry on the ordinary business of life with comfort. He takes great pains to discriminate the different kinds and degrees of pulmonary disorders, and the varieties of climate adapted to each. His style is lucid, and his last chapter on "Colonial Life and Australian Scenery" is both interesting and instructive to the general as well as medical reader. It is evident that the pulmonic or Indian invalid visiting the colony need not want opportunities for enjoying some of the finest scenery in the world, or of mixing with as intellectual and refined society as in our own country. With the aid of steam by land or water, he can choose his own location for the time being, as prudence or fancy may dictate. Should any self-satisfied Briton be inclined to think that Melbourne is psychically or æsthetically behind the age, he need only read the long list of scientific institutions and various societies, given at page 132, as existing in this metropolis of a few years' existence, in order to convince him of his error.

On one point we should be glad to have further information. Our author says that in this part of the world children grow very fast, and are early developed into men and women: this we know to be the case at the Cape and other places which have a climate approaching to the tropical in character, but such precocity seems to be inconsistent with strength of constitution, as it undeniably is with reference to children reared in the West or East Indies. We find it difficult to reconcile this with the other fact alleged by our author, viz., that our race preserves its national type when transplanted to Australia, the third generation even showing the robustness of frame and features, cha-

racteristic of the Briton. We cannot think that a very rapid physical development can conduce to that force of constitution which is necessary for the perpetuation of race and character, and most physiologists are agreed that periods of repose are as necessary for the due development of the human frame as they are in the case of other organisms. We must not omit to mention that Dr. Bird's work contains much valuable statistical information, afforded by Professor Neumayer, of the Melbourne Observatory, and Mr. Archer, the Registrar-General of Australia, besides some handsome illustrations of colonial scenery.

On Skin Diseases of Parasitic Origin. Their Nature and Treatment; Including the Description and Relations of the Fungi found in Man. By W. TILBURY FOX, M.D., Lond., Physician-Accoucheur to the Farringdon Dispensary, &c. 8vo., pp. 210. London: Hardwicke, 1863.

CONSIDERING it as erroneous to regard skin-diseases as a *specialty*, and thus to favour the mistaken principle of treating them rather as local ailments than as indications of a general morbid condition of the system, Dr. Fox describes the cutaneous affections due to vegetable parasitic growth from a wider point of view than is usually adopted.

The main points to be regarded in the estimate of parasitic diseases of the exterior of the body are, as Dr. Fox observes:—
1. The existence of a special soil, or diathesis. 2. A pathological lesion (*i. e.*, a disease of the hairs and epithelium). 3. The cause of the lesion (*i. e.*, the fungus).

Upon the first point, and, in fact, upon each, much diversity of opinion exists. The majority of writers advance that weak, scrofulous young persons are most liable to attacks of parasitic skin diseases; but this has been strongly denied by others. In the Report on Favus, contained in the "Medical Times" for 1859, Mr. Hutchinson shows that in many cases there is a want of evidence of any scrofulous or tubercular condition of the patients suffering from it previously to the first appearance of the favus. Bazin has stated that this affection is often present in healthy children, and Dr. Jenner supports the same view of the question. The author leans to the commonly-accepted notion, and pertinently concludes his remarks on this point, by the inquiry—"Can we say that a subject is *healthy* on whom a parasite is luxuriating?"

After a consideration of the nature of the various parasitic cutaneous disorders, the subject of the identity of the fungi found upon or within the human body, epiphytes and entophytes, and of their relation to each other, is fully discussed. The

author states, that the results of his investigation, which he has already partly communicated in a paper in one of the medical journals, are:—That Tinea (the generic term for parasitic affections of the surface of the body), which is a disease of the hairs and epithelium, and not an eruptive one, must be regarded as essentially and primarily caused by the growth of a fungus; that only one parasite exists, this being common alike to the several so-called distinct kinds of Tinea, and that the variations in its physical and minute appearances, are due to “the *super-added* rather than the *essential* conditions;” that a certain soil is requisite for the growth of the Tinea fungus; and that, in consequence of these deductions, the treatment should consist of general measures to correct the state of the part where the fungus grows, and of local measures to destroy the parasite. It will also be necessary to endeavour to promote the re-growth of the hair, where it has been destroyed.

The principal remedies recommended by Dr. Fox are cod-liver oil, iron (especially when the subject of the disease is a scrofulous, debilitated person), and arsenic. Great care should be observed in the administration of the latter, which should be temporarily discontinued after a few weeks, or sooner, if the constitutional effects of its exhibition manifest themselves, for, although the moderate employment of arsenic, particularly in conjunction with iron if anæmia be present, may be often very beneficial to the patient, its free and long-continued use is generally productive of harm.

Sometimes, when there are symptoms of gastric disturbance, as evidenced by defective appetite, foul tongue, a harsh, dry skin, turbid urine, and irregular action of the bowels, aperients, and a mild course of alkali, combined with some bitter infusion, are often followed by considerable improvement in the state of the patient.

Tinea sycosis is not unfrequently connected with the existence of habits of over-indulgence in fermented liquors, which must be strictly interdicted in such cases, and the general treatment should be rather of an antiphlogistic nature. The bowels should be regulated by saline aperients. If irritable dyspepsia be present, alkalies with an aromatic and a bitter infusion should be given shortly before meals. If the dyspepsia be of an atonic character, and the tongue remain clean, the dilute mineral acids may be advantageously administered. If the disease be connected with a syphilitic taint, the iodide of potassium and sarsaparilla will be found useful. In most other cases, cod-liver oil, arsenic, or iron, will be indicated.

As regards the local treatment of Tinea, venesection has been advised in cases marked by excessive activity of the circulation, but in most instances cooling saline aperients and fomentations are sufficient to remedy this condition. In sycosis, when the

chin is hot, smarting, tender, and swollen, the author is of opinion that benefit is derivable from the local abstraction of blood by means of a few leeches.

The old plan of using setons, or issues, in chronic cases of Favus and Tinea tonsurans, at one time, especially resorted to before commencing the cure of the affection, as a safeguard against extension of mischief to the brain (a plan highly recommended by, amongst others, the late Dr. Graves, of Dublin), is deprecated by the author, unnecessarily perhaps, for, as he observes, physicians at the present day do not countenance this proceeding, so that there is scarcely occasion for inveighing against it.

In these, as in all cutaneous affections, cleanliness is most essential, and the surface of the skin must be kept perfectly clean by poulticing and greasing it, and afterwards washing it with soap and water.

Parasiticides applied topically suffice to effect a cure if the disease be recent, and of a slight nature, but the removal of the hair is often absolutely requisite to facilitate, or to complete, the cure, as the sporules of the parasitic growth are always most abundant in and around the roots of the hair. As the author emphatically observes,

“Any plan of treatment which makes the removal of the entire hairs of first importance, is decidedly that best calculated to cure Tinea.”

Various methods have been suggested for this purpose, but the easiest and the best is to remove the hairs by means of a pair of forceps. The application of a little chloroform from time to time will diminish the amount of pain produced during this operation; the scalp should be well greased subsequently, to prevent fresh inoculation with the unhealthy matter. If, for any reason, depilation be not adopted, the hair of the diseased patches should, at any rate, be closely shaved in Tinea tonsurans.

The best application for the destruction of the fungus-growths is, according to Dr. Fox, a spirituous solution of the bichloride of mercury, in the proportion of two scruples of the bichloride to half-an-ounce of spirit, or of about half this strength in slight cases, brushed lightly over the affected part. Preparations containing dilute carbolic acid, tincture of iodine, nitrate of silver, or iodide of sulphur, are also useful in mild cases.

Soothing, emollient applications, such as glycerinē, decoction of poppy-heads, and the zinc ointment of the Pharmacopœia, are requisite to arrest the spreading of the inflammatory symptoms which arise from the topical employment of the more powerful preparations used for the destruction of the parasitic growths.

The minute descriptions of the parasites, of which some good illustrations are placed at the commencement of the book,

are, for the most part, condensed from those contained in Küchenmeister's work on the same subject.

On the whole, Dr. Fox has managed to give a clear and concise account of a class of diseases, concerning which mystery and confusion have hitherto been allowed to exist; and the very creditable manner in which the work before us has been executed augurs well for the utility of the essays upon skin diseases, which the author, in his preface, promises at some future period.

PAMPHLETS.

On the Distribution of Nerves to the Elementary Fibres of Striped Muscle. (2 fasciculi.) By L. S. BEALE, M.B., F.R.S., Professor of Anatomy and Physiology at King's College; Physician to the King's College Hospital, &c.

In these two papers, which are reprinted from the *Philosophical Transactions* for 1860 and 1862, Dr. Beale gives the results of his investigations upon this point, concerning which he has arrived at conclusions opposed to those formed by the great German physiologists Kühne and Kölliker.

The two views which are entertained with respect to the peripheral distribution of nerves are, as is well known, incompatible with each other. According to one, which is the opinion of many continental observers, and has been generally received by anatomists, it is advanced that nerves terminate by free ends in the tissues to which they are distributed. The other doctrine is that these supposed free extremities do not exist, and that the nerve-fibre, after a long and circuitous course, is connected with the nervous centre from which it emanated.

The conclusions at which Dr. Beale was led to arrive by the investigations described in the first published of these papers were "that the nerve-fibres formed, as it were, a network over the muscular fibres, but that every muscular fibre was supplied with nerves throughout its whole length." The author was thus placed in opposition to most other observers, as the commonly accepted doctrine is "that nerve-fibres terminate in free ends on the muscle, and that nerve-fibres only come into contact with the muscular fibre at very distant points, so that while the fibre, or the entire muscle, is freely supplied with nerves at one situation, the greater part is altogether destitute of nervous supply."

Subsequently to the publication of Dr. Beale's first paper, Kühne, in a memoir on the "Peripheral Organs at the ends of the Motor Nerves," and Professor Kölliker, in the Croonian Lecture of 1862, stated their adhesion to views contrary to those of the author, both of them being agreed as to the existence of free ends. On some points these two observers differ, as Kühne maintains that the free ends are situated beneath the sarcolemma, and are connected with special organs, whilst Kölliker has failed to demonstrate the special organs noted by Kühne, and also says that the free extremities lie upon the surface of the sarcolemma, not beneath it. Both are united, however, in considering that the muscular fibre receives only a limited supply of nerves, and that this supply is confined to one part of the muscle.

In Dr. Beale's second paper, he describes more fully than in the previous one, the principal microscopic investigations which he has made of the muscles

of the frog, and especially of the thin pectoral muscle. In restricting himself entirely to the consideration of the distribution of the nerves to the muscles of this animal, he has been influenced by a desire to conduct his examination as nearly as possible under the same conditions as the German observers, whose deductions were chiefly made from minute dissections of the muscles of the frog.

We are unable to follow the author in his demonstration, which, indeed, it would be difficult to lay fairly before the reader without the aid of some of the beautifully executed figures with which Dr. Beale illustrates and enforces his arguments.

An anatomist possessed of such accuracy of observation as the author of these interesting papers, is scarcely likely to arrive in a second series of experiments at any great deviation from the conclusions based upon his first set of observations; and the reader will consequently not be surprised to learn that, instead of being induced to modify his views, Dr. Beale only looks upon them as confirmed by his more recent investigations.

Notes on Clinical Medicine. By. W. F. WADE, M.B., B.A., Senior Physician to the Queen's Hospital, and Professor of Physic and of Clinical Medicine at Queen's College, Birmingham. 1863. Pp. 16.

Dr. Wade's first paper is "On Diphtheria." For a considerable period after the commencement of the recent epidemic of this disease, the *post-mortem* observations which were made were confined to the gastro-pulmonary mucous membrane, and, as the conditions of this tract did not seem to explain many of the phenomena of the disease, the author was induced to examine other vital organs, when he found alterations which led him to look for albuminuria. His investigations establish the fact that albuminuria forms a prominent complication in this disease, making its appearance generally about the seventh or eighth day, but it may occur at any period. The indications of diphtherical albuminuria are:—Diminution of the amount of the urine; suppression of the lithates; nervous symptoms, such as indifference to surrounding objects, somnolence, and coma; increased pyrexia may also be present. These symptoms are relieved by increased urinary excretion. With regard to the treatment, Dr. Wade lays great stress upon the diluent plan of treatment by the ingestion of bland fluids in as large a quantity as the patient will take—half a pint every hour or two, if possible, in the case of adults. The patient should be kept in bed, and warmly clothed with flannel. As a remedy, the author considers iodide of potassium, in two, three, or four grain doses, every two or three hours, conjoined with five to ten grain doses of chlorate of potash, to be the best. This plan exercises a speedy and salutary influence upon the general symptoms of the disease, and the exudation often diminishes with extraordinary rapidity. If deficiency of urine be present, bitartrate of potash, or solution of the acetate of ammonia may be given to help to restore the secretion. This general plan of treatment does not preclude other remedies in special cases—as iron, &c. Dr. Wade does not consider the secondary paralytic affections in diphtheria as sufficiently explained by a reference to reflex irritation; and he thinks it possible that minute dissection might discover some organic change in the nervous centres, the nervous periphery, or the muscular tissues. He disapproves of the treatment of this form of paralysis simply by quinine and tonics, and believes that more speedy results may be obtained by eliminants, such as the iodides of potassium, and of iron, and bichloride of mercury with bark. Blisters appear to exercise a beneficial effect upon paralysis of the palate, if applied early to the top of the sternum.

Dr. Wade's second paper is upon a case of Aortic Aneurism, in which

a communication with the pulmonary artery was recognized by physical signs during the life of the patient. We regret that we are unable to give an abstract of this case, in which the diagnostic success obtained by Dr. Wade was remarkable, and highly encouraging to those under whose observation similar rare cases may come; but we must refer our readers for particulars to Dr. Wade's pamphlet itself, or to the *Medico-Chirurgical Transactions*, in which the case has been published.

On Special Hospitals. By WILLIAM MARTIN, F.R.C.S., late Surgeon Bengal Army, and Professor of Ophthalmic Surgery, Calcutta Medical College. Pp. 22. 1863.

A paper read at the Canterbury Annual Meeting of the British Medical Association. Our readers will recollect the attacks which were made not long since upon institutions for the treatment of special affections. Mr. Martin having, during many years in India, been officially connected with a special hospital, viz., the Calcutta Eye Infirmary, felt much interest in the subject, which he took some pains in investigating. He is inclined to think, and we agree with him, that the specialists have had, upon the whole, the best of the argument in this dispute. The injury which special hospitals have inflicted upon general hospitals is, for the most part, imaginary, while it cannot be denied that the improvements in many branches of medical education,—Ophthalmic and Orthopædic Surgery, for instance,—are mainly due to the opportunities which special institutions afford for the study of particular diseases. Besides, it is always in the power of the managers of general hospitals to appoint physicians or surgeons to take charge of special departments for certain classes of cases, in order that students may be thoroughly instructed concerning them, if as some advance (wrongly, we think) that these cases are diverted to special institutions, to the detriment of those where all forms of disease are received indiscriminately. Mr. Martin deserves great credit for the able way in which he has summed up this question.

MONTHLY RETROSPECT OF BRITISH AND FOREIGN MEDICAL JOURNALS.

MEDICINE.

The Treatment of Asiatic Cholera.—Dr. Donaldson, surgeon in the Indian Army, details, in the *Edinburgh Medical Journal* for December, 1863, the treatment which he adopted during an epidemic of this affection at Vizagapatam, in the Madras Presidency. Calomel, opium, and other usual remedies were administered, but chloric ether and aromatic spirits of ammonia were found most efficacious in arresting the malady. These were given in combination; a bottle was kept ready, containing these two ingredients, together with a suitable proportion of chalk mixture, and, on the admission into hospital of each patient seized with cholera, or complaining of premonitory symptoms, a dose of this mixture was given, pending the discovery of the

exact nature of the individual case. If vomiting proved the prevailing feature, dilute hydrocyanic acid was added to the mixture, until that complication was subdued. When purging became the most urgent symptom, the solution of the hydrochlorate of morphia was combined in such quantity as was requisite; if the purging continued, tincture of catechu was also superadded. As soon as the vomiting or purging were checked, as the case might be, the first-named mixture was again resorted to, and the chloric ether and aromatic spirit of ammonia were the chief weapons with which the disease was combated. This plan of treatment was found still more successful with the natives than amongst the Europeans; probably, as Dr. Donaldson observes, for the reason that the former live more plainly, and are consequently more readily affected by such powerful remedial agents.

Endemic Catalepsy.—Dr. Vogt, of Wurzburg, reports upon an endemic form of catalepsy prevalent in the village of Billingshausen, about four leagues from Wurzburg, in Bavaria, where a very large number of persons—nearly one-half out of a population of 356 people, have suffered from this affection. The manner in which the attacks come on is as follows:—The person who is attacked does not experience any premonitory symptoms; he suddenly remains in the position which at the moment of the attack he happens to have assumed; his face becomes ghastly pale; the eyes are fixed upon a particular object, and continue motionless; the lips are closely compressed, and the fingers are generally bent upon the palms of the hands, although they are sometimes agitated, as well as the eyes, by slight tremulous movements (indicating some relationship between these attacks and hysteria, *Translator*); the power of speech is lost, and the patient is only able to utter indistinct, broken cries; the whole muscular system is in a rigid state; the intellectual and sensorial functions are not lost. The patients themselves especially notice the state of tension of the muscles, but they do not complain of any particular pain; it appears, according to their description, as if the circulation were temporarily checked, and became restored at the end of about five minutes; this latter sensation denotes the termination of the fit. The fits are often brought on by the impression of cold; they are frequently evidenced when the patients have removed part of their clothing before commencing work in the fields, &c. They are produced on all occasions by almost any cause. The malady differs very much in its intensity in different people. It is transmitted hereditarily, sometimes passing over a generation. It occurs with special severity in families in which the father and mother are both subject to it. The frequency of the fits is very variable; sometimes they recur daily, whilst in other cases they only happen once in a week or fortnight. The inhabitants

of the place affirm that, from the most tender age, even a few days only after birth, they can prognosticate that a child will be subject to catalepsy, by the irregular movements of the eye-balls which are present when the infant is placed in a bath. The proportion of the population attacked is, as has already been stated, enormous. The causes of the epidemic are almost entirely unknown; Dr. Vogt is disposed, however, to attribute the prevalence of the affection, in some degree, to repeated marriages of consanguinity.—*Wurzburger Medizinische Zeitschrift*.

The Presence of Albuminuria in Cases of Lead-Poisoning.—M. Auguste Ollivier states that out of 37 patients suffering from the effects of lead-poisoning, and admitted into the Hôpital Charité, 9 presented decided symptoms of albuminuria. In one patient, who died in the hospital, *post-mortem* proofs of confirmed Bright's disease of the kidney were discovered. In some of the cases chemical analysis gave evidence of the presence of lead in the urinary secretion. If the lead in process of elimination by the kidneys is deposited in any part of those organs, it doubtless irritates them, in consequence of its mechanical action, the ultimate result being serious alteration of the renal tissue. If, instead of remaining there, the lead only passes through the kidneys, then in the place of persistent albuminuria connected with permanent lesion of the kidneys, there will be temporary albuminuria, with temporary injury to the renal structure. M. Ollivier does not attempt to explain, in a positive manner, why all of the patients suffering from lead-poisoning do not become albuminuric; but it appears probable, that, as we know to be the fact with other poisons, the lead may be eliminated through various channels, according to individual peculiarities of constitution, so that in some cases only a small proportion of the lead is got rid of through the medium of the kidneys, and consequently the effects upon those organs would be only transient and slight. When this occurs the circumstance of albumen being present in the urine at any stage of the affection may altogether escape observation.—*Archives Générales de Médecine*, Dec., 1863.

SURGERY.

Fracture and Dislocation of the Sixth Cervical Vertebra.—A workman, 35 years old, fell from a height upon his head, and was brought to the hospital at St. Petersburg, where he was placed under the cure of Mr. J. Erichsen. The fall was followed by immediate loss of consciousness, but, upon his admission into the hospital, the patient had recovered his senses, and gave rational answers to the questions which were put to him. There was no apparent injury to the vision or the hearing, nor were there any head-symptoms, but the man complained of very intense pain situated at the nape of the neck, opposite to the

fifth and sixth cervical vertebræ, and greatly exacerbated by the least movement of the head; pressure at this spot caused great pain, and abnormal mobility of the vertebræ could be felt, without its being possible, however, to detect positively fracture or dislocation. No marks of external injury were present. The muscles of the face performed their functions regularly; there was no difficulty in swallowing; the skin of the face had preserved its full degree of sensation; no sickness. On the other hand the muscles of the trunk and of the extremities were all paralysed; the slightest movement was impossible; there was paralysis of the intestinal muscles, of the bladder, and of the rectum. The only muscle still remaining in a condition of activity was the diaphragm. Complete anæsthesia of the skin in all of the paralysed parts was present. This general paralysis of the motor and sensory functions pointed to some grave lesion of the spinal cord in the cervical region. Œdema of both lungs supervened; expectoration became impossible; and the patient died of suffocation on the sixth day after the accident.

A *post-mortem* examination revealed the existence of a fracture of the spinous process of the 6th cervical vertebra, and of the two halves of the ring which formed two bony fragments separated from the process; there was also fracture of the transverse processes, and dislocation of the 6th from the 7th vertebra. The articular surfaces of the 6th vertebra were forced from their articulation, and the membranes were torn. Being desirous of making a whole preparation of the part, the surgeon did not open the vertebral canal, but he supposes, from the symptoms and the nature of the injury, that the spinal cord must have been completely destroyed in this region.—*Saint Petersburger Medizinische Zeitung*, 1863.

The Surgical Treatment of Glandular Swellings of the Neck in Children.—In opening glandular tumours in the neck in young children, M. Guersant prefers the seton, which does not usually leave any subsequent traces. He employs three or four silken threads, which he passes through the tumour by means of a fine, flat needle, in such a manner that one of the openings is more inferiorly situated than the other, and that the threads pass in the direction of the folds of the skin, or follow the course of the muscular fibres, as, for instance, of those of the sternomastoid muscle. If fluctuation has become evident before the seton has been introduced, the pus may be seen to escape through the openings made by the threads. Its evacuation may be aided by pressure; and the whole of the affected part should be covered with a large poultice, care being taken to alter the position of the threads every day. When neither suppuration nor swelling remain, the seton can be withdrawn; while the tumour still continues, the presence of the seton hastens its dis-

charge. At the termination of this plan of treatment only two little points are visible, and of these no traces can be discovered at a later period.—*Gazette Médicale de Paris*, Nov. 14.

Rupture of the Axillary Vein, from a Dislocation of the Humerus into the Axilla.—The patient, a man 59 years old, of spare and weakly habit of body, was thrown out of a vehicle on the 15th of November, 1862. A dislocation of the humerus into the axilla was discovered, and very easily reduced; and the patient was then removed home, the arm being safely secured. On the following day he was visited, and the case seemed to be progressing favourably, with the exception of pain in the wrist, which was reddened, and appeared to have been sprained. A fomentation was prescribed for this, but when he was again seen on the 19th the pain in the wrist still continued, and the hand and part of the forearm were swollen. A bandage extending up to the shoulder was then applied. On the 24th the pain and swelling of the hand, wrist, and forearm were intense. A spirit lotion was ordered to be constantly applied, and a dose of morphia was administered every four hours. The pain was somewhat relieved by this treatment. The case was under the charge of a medical friend until the 7th of December, when Mr. Hailey, of Newport Pagnell, who reports the case, first saw the patient, and found him in the following condition:—The whole limb, from the acromion process of the scapula to the extremity of the fingers was much swollen, and the cuticle very sodden; in fact, almost elephantised, exciting the suspicion in my mind that the head of the bone was unreduced, and was compressing the great vein. The patient himself thought, from the pain in the axilla and the loss of power in the limb, that the bone was out of place. On raising the heavy arm, and rotating the limb, the head of the humerus was clearly ascertained to be in position. The treatment consisted of anodyne applications, a generous diet, tonics, and opium to produce sleep. This condition continued without much alteration for upwards of a month, when (on January 14th, 1863) a tumour presented itself between the acromion and coracoid process. There was a serous discharge from the axilla, which with slight encouragement, appeared to increase; but, the fluctuation not being sufficient to convince Mr. Hailey of the presence of matter, he punctured the swelling with a grooved needle, and blood only escaped. Symptoms of pyæmia were now present, accompanied by diarrhæa, delirium, and great prostration of strength, and the patient died comatose a few days after the tumour had first appeared. *Post-mortem* examination, seven hours after death.—Upon dissecting back the skin and superficial fascia from the middle of the great pectoral muscle to its insertion into the humerus, so as to bring into view the anterior wall of the axillary space, the projection

seen during life near the coracoid process of the scapula was fully exposed, distending the fibres of the pectoralis major on its way to the humerus. On division of these fibres, the nature of the tumour was explained. A substance, apparently solid, of the size of the fist, presented itself through the opening, as if bound down by great pressure. This substance was found to be coagulated blood, with part of the muscular tissue of the lesser pectoral, whose tendon was left attached to the humerus. The axillary space being now explored, every part of it was found to be filled with coagulated blood, a little of which appeared recent. The arteries and veins extending from the axilla to the chest could not be discriminated; and not a gland could be perceived. More than two pounds of coagulated blood with altered tissue were removed from the axillary space. The head of the humerus was found in its proper position; but on close inspection, no axillary vein could be perceived; and after searching for some time, its subclavian portion was discovered; on carrying the dissection down the arm, the upper portion of the cephalic vein was found enveloped in a coagulum of blood. In the forearm, not a trace of the vein could be found. The veins at the bend of the elbow could not be traced. The enlargement of the whole limb was the result of infiltration into the tissues, in some parts more than an inch in thickness. The muscles and arteries were healthy, and apparently well nourished.

Remarks.—The interest in this case consists in the extreme rarity of such an injury as rupture of the main vein by dislocation of the humerus. Mr. Hailey is not aware of any similar instance being on record, and it is somewhat difficult to understand how the rupture of the vein could have been effected, when so little violence was used in restoring the head of the bone to its original situation. It therefore becomes a question as to whether the injury must not have been inflicted at the time of the original accident. When we take into consideration the spare habit and age of the patient (about 60), this hypothesis appears very tenable; for at that period of life a great change is taking place in the tissues of the body; and although pathologists do not allow that a change in the structure of the veins similar to that of the arteries is undergone, they fully admit that the former are subject to lesions of another nature, such as softening, etc., which will render them at this particular period of life as much prone to rupture on the application of any undue violence as the latter. Therefore, Mr. Hailey thinks the reasonable theory of the case is that there existed a diseased condition of the coats of the axillary vein at the time of the original accident.

As to the treatment, it might be suggested whether, if the nature of the contents of the cavity had been discovered earlier, and it had been cut down upon, and the large quantity of blood

there enclosed removed, the life of the patient could not have been spared. This course was not open to Mr. Hailey, as no means of diagnosis existed, besides the prominence between the coracoid and acromion processes; and this did not take place until the pyæmic symptoms had made their appearance, and the health of the patient had become very much shattered. The autopsy proves beyond a doubt that if the blood had been removed at the time of discovery, the patient could not have been recovered; for there was not that oedematous condition of the parts below the seat of injury usually present in cases of pressure upon large arterial or venous trunks; but the condition usually present in cases of entire occlusion, or obliteration of large veins, a perfect mass of fat, as Hasse so clearly describes it, "like bacon fat"—not a vein to be perceived.—*British Medical Journal*, Dec. 12th, 1863.

Improved method of producing a Radical Cure of Varicocele.—By means of a simple apparatus which he has devised, Dr. Packard, of Pennsylvania, has obtained considerable success in the treatment of this affection. All the apparatus which are required are a needle, a fine annealed iron wire, and a piece of sheet lead. The needle is rather slender, of from 2 to 3 inches in length, and curved slightly towards the point; its eye is near the point, and it is either fixed in a handle, or headed so as to be firmly held with a pair of forceps. The lead plate is about an inch and a quarter long, by half an inch in width; it has a hole bored through it, close to each end. Having isolated the enlarged veins in the ordinary manner, he passes the needle, armed with the wire, behind them, and slips it back along one end of the wire, leaving the loop. Cutting off the long end of the wire, he now arms the needle again, and passes it in the opposite direction, in front of the mass of veins, through the same openings in the skin; it is then withdrawn as before, again leaving the loop. Each pair of ends is now passed through the other loop, when the mass of veins will be enclosed between the two double wires. Now, taking the lead plate, he passes the ends through the holes in it, draws them rather tight, and gradually twists them all together over the middle of the plate. By twisting the collected ends of the wires once or twice every half minute or so, there may be gradually effected a most forcible constriction of the diseased vessels; the twisting may be suspended when the pain caused becomes severe, or when the operator feels satisfied that the tissues must be cut by the wire, if the pressure be further increased. Half a dozen additional turns, or more, may be daily made until the loops of wire have come together, which will be known by their looseness in the sinus formed by their passage. Now, by simply dividing them near one opening, they may be drawn out by pulling on the longer end. So slight is the pain caused by this operation, that he has

not yet found it necessary to resort to anæsthesia for its performance. But the point he particularly wishes to draw attention to, is the cheapness, efficiency, and simplicity of this apparatus. The security given by the twisting of the ends of wire, and the power which it affords of gradually tightening the loop in any case, appear to be among the great advantages of metallic over other sutures.—*American Medical Times*.

MIDWIFERY.

The Prevention and Cure of Puerperal Inflammations.—Under this head, Dr. Robert Johns, Consulting Accoucheur to the Combe Lying-in Hospital, describes the causes of *post-partum* inflammation, the most common of which are the following:—Impaired health during pregnancy, want of cleanliness and ventilation, contagion, and epidemic influence, distress of mind from various reasons, anxiety and excitement caused by visitors, errors in diet, and the use of stimulants, hæmorrhage during delivery, retained placenta, or putrefied clots in the uterus, drawing the breasts too soon after delivery, exposure to cold, going out too soon after delivery, puerperal convulsions, either actual or threatened, uterine disease, and the inhalation of chloroform during labour, to which latter cause he attaches considerable importance.

In a subsequent account of the remedies to be adopted in the treatment of puerperal inflammation, he speaks highly of mercury as an antiphlogistic in these cases, and recommends it to be resorted to early in the course of the affection, and to be perseveringly continued. Local or general blood-letting are sometimes requisite; but local bleeding by means of leeches is usually preferable to venesection, and is more easily borne by the patient. Dr. Johns recommends opium to be given in combination with the mercury, and speaks highly also of the administration of bismuth. Fifty-two cases are described at some length—the principal conclusions arrived at by the author, after a careful consideration of the subject, being, that the rate of mortality in child-birth is too high; that some form of puerperal inflammation is the cause of death, in many instances; that it is often overlooked, either from ignorance or too superficial an examination; that chloroform seems to predispose to a fatal issue; that the attacks of puerperal inflammation may often be prevented, whilst it may also be more frequently cured than it is; and that early and active treatment is always advisable.—*Dublin Quarterly Journal of Medical Science*, No. 71.

Treatment of Cases of Head, or Shoulder, Presentation when there is great Deformity of the Pelvis.—At a meeting of the Academy of Medicine, M. Pajot read a paper upon this subject. Although, fortunately, the coincidence referred to is very infrequent, the

subject is one of considerable interest and importance. In thirty cases of labour, complicated by deformity of the pelvis, which came under M. Pajot's observation at the Lying-in Hospital of the School of Medicine, in the course of ten years, only thirteen were cases of excessive deformity, in which the longest diameter was less than three inches. In five of these patients, the trunk of the foetus presented, and the contraction was so great, as absolutely to prevent the introduction of the hand. In cases of this kind, natural parturition is impracticable, and the very anxious question of the relative value of the life of the mother and of her child, forces itself on the practitioner's consideration; one life must be sacrificed, and the surgeon has no choice but between embryotomy and the Cæsarean operation. M. Pajot conceives, that under the circumstances alluded to, both are equally desperate resources, and adduces, in support of his views, the history of his five cases of transverse presentation, which all proved fatal with one exception; he therefore unhesitatingly declares himself favourable to the Cæsarean section.

He concludes with the following remarks:

In the case of a full-grown, living child, if some part of the trunk presents, and the diameter of the maternal pelvis is less than $2\frac{3}{4}$ or 3 inches, after the accoucheur has vainly endeavoured by external manipulations to turn the child, the Cæsarean section is justifiable.

If labour sets in before the full time, and turning is impracticable, amputation of one arm will much facilitate the evolution of the foetus, and the section of the neck may be performed by a new procedure discovered by the author.

If a full grown child has ceased to live, whatever be the difficulties attendant upon delivery, *per vias naturales*, the Cæsarean operation must on no account be attempted. Embryotomy must be resorted to, and the foetus extracted by repeated applications of the cephalotribe.

M. Pajot's method of dividing the neck of the foetus is of a very simple character, and consists in passing round the neck a strong silken or hempen ligature, by means of a blunt hook bearing a groove for the reception of the thread; at one extremity of the latter is attached a leaden ball, for its more easy extraction, and the operator holding both ends, divides the tissues by a see-saw movement.

The same procedure is applicable even when the cervical region of the foetus cannot be reached, and the ligature divides with the same ease, the parts of the body situated between the lower angle of the scapula and the crista illi.—*Bulletin de l'Acad. de Médecine.*

THERAPEUTICS AND MATERIA MEDICA.

The Physiological Action of Digitaline, especially with Reference to its Influence upon the Urine.—The utility of digitaline in the treatment of affections of the lungs and heart, when we wish to lower the force of the circulation, is well known; but writers are not agreed with respect to its influence upon the urinary secretion. Dr. Stadion has made this point the subject of numerous observations and experiments; the general results at which he has arrived are embodied in the following abstract. Digitaline produces a diminution of the quantity of fluid secreted by the kidneys; it also causes a diminution of the principal constituents of the urine, such as urea, chloride of sodium, the phosphates and sulphates, but it increases the quantity of the uric acid,—the degree of acidity of the urine remaining much the same, however, as usual. The specific gravity of the urine is lowered during the period of the administration of digitaline. Rapid wasting and lowering of the powers of nutrition follow the use of digitaline, which acts very similarly to digitalis upon the circulatory, nervous, and muscular systems. Its depressant action upon the generative organs is very marked. The strength of the alkaloid, compared with that of digitalis, is as 30 to 1.—*Vierteljahrschrift für die Praktische Heilkunde.*

Glycerolate for the Treatment of Irritation of the Gums during First Dentition.—The editor of the *Bulletin de Thérapeutique* recommends the following topical application in the treatment of this occasionally very troublesome affection. Glycerine, an ounce; chloroform, fifteen drops to half a drachm; tincture of saffron, fifteen drops to half a drachm. A few drops to be gently rubbed with the tip of the finger upon the inflamed gums.

Antidotes for Strychnia.—Professor Bellini, after conducting a long series of experiments on poisoning by strychnia and its salts, has arrived at the opinion that the best antidotes are tannic acid and tannin, chlorine, and the tinctures of iodine and bromine. Chlorine, he maintains, neutralises the strychnia even when it is diffused through the system; for he found that when animals poisoned with the sulphate of the alkaloid, were made to inhale chlorine gas in quantity such as was not sufficient in itself to kill, the convulsions were retarded, and were milder when they occurred; death also was less rapid. The author further observed, that when strychnia was exhibited with pyrogalllic acid, the convulsions were retarded for the space of half an hour, in comparison with other experiments in which the alkaloid was given by itself. Professor Bellini believes that this arrest in symptoms is not dependent on the acid acting chemically on the strychnia, but only

through the astringent effects which it produces on the mucous membrane of the stomach, by which the absorption of the poison is rendered difficult. The same author, speaking of the frog-test for strychnia, asserts that it is not to be trusted, inasmuch as other poisons produce tetanic symptoms, although in a minor degree. He adds, in speaking of the effects of the antidotes to which reference has been made, that he hopes that his results will have a bearing not only on the treatment of tetanus from strychnine, but also on traumatic and idiopathic tetanic disease.—*Annali di Chimica*.

Aconitum Napellus (*Monkshead or Wolfsbane*.)—The origin of this as a medicinal agent, like that of many other remedies, is lost in obscurity. The Greeks mention a certain poison of great virulence under the name of *akoniton*; but the characteristics of the preparation as given by Theophrastus can hardly be made to coincide with those of any preparation of aconite now in use. The plant, however, grew in Greece indigenously; and, no doubt, the Greeks were acquainted with its medicinal and poisonous properties. Many botanists place it amongst the indigenous plants of Great Britain; but this is somewhat doubtful. De Candolle enumerates no less than twenty-nine distinct species of aconite; many of these are most likely identical. According to the London Pharmacopœia, the root, the recent and the dried leaves, are all directed to be used in medicine. The taste of these parts of the plant is peculiarly characteristic. If a small portion of the leaf or root be chewed, a bitter taste is first perceived, followed by a singular feeling of numbness spreading gradually over the lips, the tongue, and the fauces.

The effects of aconite on the human system are caused principally by the vegetable alkaloid *aconitine* which it contains in notable quantities. A peculiar acid, aconitic acid, is found in the juices of the plant. The extract frequently contains crystals of aconitate of lime. The different preparations of this plant are used externally in neuralgia and rheumatic maladies. Taken internally, they have a narcotic, sedative, sudorific, resolvent, and diuretic action. It is prescribed in a large number of diseases, amongst which may be included rheumatism, gout, neuralgia, phthisis, hypertrophy of the heart, paralysis, and epilepsy. The vegetable alkaloid *aconitine* is the most virulent poison known, one-fiftieth of a grain having been known to place a human life in danger. The alkaloid is somewhat difficult to prepare in a pure state; great quantities of spurious *aconitine* are consequently offered for sale in the market. They mostly bear French or German labels. That manufactured by Morson, and one or two more of our best chemists, can alone be relied on. Some of the foreign specimens above-mentioned have been administered to dogs in quantities of several grains without having any effect upon the animal beyond

causing temporary drowsiness. The alkaloid made into an ointment and spread on the eyelid causes contraction of the pupil of the eye—a directly contrary action to that of belladonna.—*The Chemist*, December 15th, 1863.

MICROSCOPY.

A New Transparent Injecting Fluid.—At the meeting of the Microscopical Section of the Literary and Philosophical Society of Manchester (Professor Williamson, F.R.S., in the chair), a paper “On Transparent Injections,” by Messrs. J. G. Dale, F.C.S., and Thomas Davies, was read by the Secretary.

After enumerating the various desiderata of a transparent injecting fluid, it was observed that soluble colouring matters failed to fulfil them, owing to the action of endosmos, causing them merely to dye the tissue sought to be injected. This defect is shown to be remedied by the use of insoluble colouring matters in an exceedingly fine state of subdivision, which can only be prepared by precipitation under constant agitation; and the following recipe is stated to succeed admirably, showing vessels of $\frac{1}{2000}$ of an inch, with a clear outline even under a $\frac{1}{8}$ objective, without any grain or extravasation of the colouring matter:—Take 180 grains best carmine, $\frac{1}{2}$ fluid oz. ammonia, com. strength, sp. gr. 0.92, or 15 degrees ammonia meter, 3 to 4 ozs. distilled water. Put into a small flask, and allow to digest without heat for 24 to 36 hours, or until the carmine is dissolved. Then take a Winchester quart bottle, and with a diamond mark upon it the spot to which 16 ozs. of water extend. The coloured solution must then be filtered into the bottle, and to this pure water must be added until the whole is equal to 16 ozs. Next dissolve 600 grains in potash alum in about 10 fluid ozs. of water, and add to this, under constant boiling, a solution of carbonate of soda, until a slight permanent precipitate is produced. Filter and add water up to 16 fluid ozs. Boil, and add this solution while boiling to the cold ammonical solution of carmine in the Winchester quart, and shake vigorously for a few minutes. A drop now placed upon white filtering paper should show no colouring ring; should it do so the whole must be rejected. Supposing the precipitation to be complete, or very nearly so, shake vigorously for half an hour, and allow to stand till quite cold; the shaking must then be renewed and the bottle be filled up with cold water. After allowing the precipitate to settle for a day, draw off the clear supernatant fluid with a syphon. Repeat the washing till the clear fluid gives little or no precipitate with chloride of barium. So much water must be left with the fluid that at last it must measure 40 fluid ozs. For the injection fluid take 24 ozs. of the above coloured fluid, and 3 ozs. of good gelatine; allow these to remain together all night, then

dissolve by the heat of a water-bath, after which it should be strained through fine muslins. On injecting, the ordinary precautions for a gelatine injection are alone necessary.

THE MONTH.

THE NEW AMERICAN PHARMACOPŒIA.

AFTER several years of suspense the profession may now rely upon the early appearance of the British Pharmacopœia, which will most probably find its way into the hands of our readers before the issue of our February number. Our present object is to briefly notice the new *American Pharmacopœia*, the compilation of which, notwithstanding the difficulties which the turbulent condition of the country has thrown in the way of the Committee, has occupied much less time than that of our own national text-book.

Until the year 1820 the Americans possessed no special work of this kind; those of London, Edinburgh, Dublin, and Paris being chiefly used. The efforts set on foot, about this date, by the Medical Society of the State of New York terminated in the production of the first edition of the *United States Pharmacopœia*, and this has since been subjected to revision at intervals of ten years. The Committee appointed in 1860, with Dr. F. Bache as chairman, has lately finished its labours, which have occupied 119 general meetings, besides repeated experiments and chemical observations. The result of their investigations and deliberations is now before us, in the shape of one compact volume.

The first thing which will strike any one acquainted with previous editions upon glancing at the newly-published *Pharmacopœia* is the great improvement which it presents over its predecessors.

It commences with a list of *Materia Medica* and Preparations. Upon an examination of this it will be seen that several remedies, formerly included, are now omitted, while a considerable number of new ones has been introduced. Amongst the new vegetable *Materia Medica* are Arnica flowers, extensively employed in the form of tincture; Ignatia, the seed of the Strychnos St. Ignatia; Leptandria, an indigenous plant, pos-

sessing cathartic properties; Pepo, a brief name for pumpkin seeds, useful as an anthelmintic in the treatment of tape-worm; and Matico, a useful styptic. Phosphorus, carbonate of lithia, first brought into notice by Dr. Garrod, of this country, and chromic acid, a powerful caustic, valuable on account of its action not extending beyond the part to which it is applied, are amongst the mineral substances which are, for the first time, introduced into the list of *Materia Medica*.

The subjoined list of new Preparations, as given in an interesting paper by Dr. Parrish in the *Philadelphia Medical and Surgical Reporter*, will show the activity of the Committee in this department:—

✓ Acetum Lobeliæ.	Extractum Hyoscyami Fluidum.
✓ Acetum Sanguinariæ.	Extractum Ignatiæ Alcoholicum.
Acidum Hydriodicum Dilutum.	Extractum Ipecacuanhæ Fluidum.
Acidum Nitromuriaticum Dilutum.	Extractum Lupulinæ Fluidum.
Acidum Phosphoricum Dilutum.	Extractum Pruni Virginianæ Fluidum.
Acidum Sulphurosum.	Extractum Sarsaparillæ Fluidum
✓ Acidum Valerianicum.	(simple fluid extract.)
✓ Æther Fortior.	Extractum Senegæ Alcoholicum.
Aloe Purificata.	Extractum Serpentariæ Fluidum.
Aluminæ Sulphas.	Extractum Spigeliæ Fluidum.
Ammonię Valerianas.	Extractum Stramonii Alcoholicum.
Antimonii Oxidum.	Extractum Taraxaci Fluidum.
Antimonii Oxysulphuretum.	Extractum Uvæ Ursi Fluidum.
Aqua Aurantii Florum.	Extractum Valerianæ Alcoholicum.
Aqua Chlorinii.	Extractum Veratri Viridis Fluidum.
✓ Aqua Creasoti.	Extractum Zingiberis Fluidum.
Atropia.	Ferri Chloridum.
Atropiæ Sulphas.	Ferri et Ammoniæ Citras.
Bismuthi Subcarbonas.	Ferri et Ammoniæ Sulphas.
Cadmii Sulphas.	Ferri et Ammoniæ Tartras.
✓ Calcis Phosphas Præcipitata.	Ferri et Quiniæ Citras.
Ceratum Extracti Cantharidis.	Ferri Lactas.
Cinchoniæ Sulphas.	Ferri Pyrophosphas.
✓ Collodium cum Cantharide.	Ferri Sulphas Exsiccata.
Emplastrum Antimonii.	Infusum Juniperi.
Emplastrum Arnicæ.	Infusum Pareiræ.
Emplastrum Picis Canadensis.	Infusum Picis Liquidæ.
✓ Extractum Arnicæ Alcoholicum.	Infusum Salviæ.
Extractum Buchu Fluidum.	— Linimentum Chloroformi.
Extractum Cannabis Purificatum.	— Liquor Ferri Citratis.
Extractum Cimicifugæ Fluidum.	— Liquor Ferri Subsulphatis.
Extractum Cinchonæ Fluidum.	— Liquor Ferri Tersulphatis.
Extractum Colchici Radicis Fluidum.	— Liquor Gutta-perchæ.
Extractum Colchici Seminis Fluidum.	— Liquor Hydrargyri Nitratis.
Extractum Colocynthis Alcoholicum.	— Liquor Sodæ.
Extractum Conii Fluidum.	— Mel Sodæ Boratis.
Extractum Digitalis Alcoholicum.	— Mistura Chloroformi.
Extractum Dulcamaræ Fluidum.	Oleoresina Capsici. }
Extractum Ergotæ Fluidum.	Oleoresina Lupulinæ. }
Extractum Gentianæ Fluidum.	Oleoresina Zingiberis. }

Oleum Erigerontis Canadensis.	Strychniæ Sulphas.
✓ Pilulæ Alöes et Mastiches.	— Syrupus Aurantii Florum.
Pilulæ Antimonii Compositæ.	Syrupus Lactucarii.
Pulveres Effervescentes.	Syrupus Rosæ Gallicæ.
Pulveres Effervescentes Aperientes. }	— Syrupus Rubi.
Pulvis Rhei Compositus.	Tinctura Arnicæ.
Quiniæ Valerianas.	Tinctura Cannabis.
✓ Resina Jalapæ. }	Tinctura Opii Deodorata.
✓ Resina Podophylli. }	Tinctura Veratri Viridis.
✓ Resina Scammonii. }	Trochisci Cubebæ.
Santoninum.	Trochisci Ferri Subcarbonatis.
Sodæ Valerianas.	Trochisci Zingiberis.
Spiritus Anisi.	— Unguentum Acidi Tannici.
Spiritus Chloroformi.	Unguentum Benzoini.
Spiritus Cinnamomi.	Unguentum Veratriæ.
Spiritus Limonis.	Zinci Valerianas.

Some of these preparations will be recognized as old acquaintances by English readers, but the greater proportion of them are not as yet *officinal*, i.e., officially acknowledged on this side of the Atlantic, although it is very likely that many will be found in the new *British Pharmacopæia*. The fluid extracts form, of themselves, a large class of preparations; and with the exception of a few, the dose of which is proportionately too powerful, will prove of practical utility. *Ferrum redactum*, formerly known by the name of *Ferri pulvis*, is iron which has been submitted to the action of hydrogen gas. *Ferri pyrophosphas* is a good tonic, possessing the double advantage of being almost tasteless, and of not being so likely to disagree with the digestive organs as the other preparations of iron. The *mistura chloroformi* contains chloroform and camphor combined into an aqueous mixture by means of the yolk of eggs, and unites in a marked degree the properties of these two remedies. The *spiritus chloroformi* is a substitute for chloric ether.

We are unable now to enter into more details respecting these American preparations; but we shall probably have occasion to refer to them again, when we publish our comments upon the *British Pharmacopæia*.

DOCTORS AND THEIR DETRACTORS.

The last number (December 26) of *All the Year Round*, contains the concluding chapters of Mr. Reade's story of *Hard Cash* (stated by the author to be "founded on facts"), which certainly comes under the head of Sensation Novel, if the sensation of astonishment at the singularly false notions which the author

entertains respecting the duties of the medical profession, and the manner in which they are performed, be taken into account. The following remarks arising, doubtless, from Mr. Dickens's feelings of annoyance at his excellent serial having been made the channel for repeated and unfounded attacks upon our profession, form a fit pendant to Mr. Reade's novel.

“NOTE.—The statements and opinions of this journal generally are, of course, to be received as the statements and opinions of its conductor. But this is not so in the case of a work of fiction first published in these pages as a serial story, with the name of an eminent writer attached to it. When one of my literary brethren does me the honour to undertake such a task, I hold that he executes it on his own personal responsibility, and for the sustainment of his own reputation; and I do not consider myself at liberty to exercise that control over his text, which I claim as to other contributors.

“CHARLES DICKENS.”

A more complete disavowal of sympathy with the sentiments contained in *Hard Cash*, could not be wished for, and our best thanks are due to Mr. Dickens, for this expression of his opinions.

For our part, we are not disposed to place upon the attacks of the author of *Hard Cash* the importance which has been attached to them by some of our contemporaries, as we believe that his statements, and the preposterous way in which they are made, are, to a great extent, self-demonstrative of their absurdity and error. We must, however, enter a decided protest against such an individual as “Dr. Sampson,” one of Mr. Reade's pet characters, being allowed to go forth as a type of what a doctor should be. If such an extraordinary person as “Th' Author an' Invintor of th' great Chronothairmal Therey o' Midicine, th' Unity Perridicity an' Remittency 'f all disease,” by which grandiloquent title, Mr. Reade introduces his friend, does actually exist, the penalty of his acquaintance would be too great a punishment for even the gross blunders which the author of *Hard Cash* has made in nearly everything which he has to say relative to the medical profession. At one time declaiming against the medical calling as a “rascally” one, and comparing it to a barrel of beer, in which “the scum” rises to the top; at another, insinuating, with cool effrontery, that no

medical practitioner is proof to the bribe of a guinea, "Dr. Sampson" (we had almost said Mr. Reade) seizes every opportunity to vent slanderous and false abuse upon the profession. From the incessant observations of this nature, which are put into "Dr. Sampson's" mouth, one would be disposed to imagine, that the "doctor" drew his inspiration from the homely beverage whence he derives one of his similes, or that he must be, to use his own elegant phraseology, "an ijjit," were it not for the excessive pains which the author of *Hard Cash* has taken to impress upon his readers, that this same "Sampson" is a model of a physician and of a gentleman. (!)

The delusions under which Mr. Reade appears to labour, are the more to be regretted from the fact that through their emanating from a writer of deservedly high reputation, and of their publication in so widely-circulated a periodical as *All the Year Round*, they will give rise to unfounded feelings of distrust of the profession, if, indeed, they have not already done so, as evidenced by the numerous vexations and ungrounded actions which have recently been brought against individual medical men. The evil will, we believe, eventually work out its own remedy; for, if no other benefit accrue, the public will, at least, learn that in disinterestedness and honesty of purpose, and in zealous endeavours to fulfil their duties to the benefit of their patients, and of the community, the members of the medical profession can lose nothing by contrast with other professions.

We have neither time nor inclination to occupy further attention with Mr. Reade's *matter-of-fact* story, in which, though seriously marred by the faults to which we have alluded, great literary power is frequently displayed, as might be expected from so accomplished an author. In order to prove that we have not spoken from a partial point of view, we may, however, give a quotation from the *Athenæum* notice of Mr. Reade's book:—

"*Hard Cash* contains gold that rings out clear music as it falls on the table, silver of impure coinage, and dirty copper. It is a love-story, an attack upon private mad-houses, and a satire on the Medical profession. The love-story is the pure gold; the base silver must be looked for in the chapters on asylums; the satire on the medical faculty is the copper."

From this extract, may be readily inferred the general tone

of the *Athenæum* reviewer, who speaks in especially marked terms of disapproval of the uncalled-for and unfounded attacks upon the Medical profession. The same verdict will probably be passed by the other literary journals, and to them, as to a jury of his peers, we leave the author of *Hard Cash*, convinced that a full sense of justice will animate their criticisms upon his book.

MEDICAL INTELLIGENCE.

CONVERSAZIONE AT THE ROYAL COLLEGE OF SURGEONS, EDINBURGH.—MR. SYME ON MEDICAL EDUCATION.—At a *conversazione*, held on the 17th inst., Professor Syme, who had carried a motion at the last meeting of the Medical Council to the effect that the Council would at their next meeting consider the propriety of recommending a reduction of the obligatory courses of lectures, read a paper upon this subject. It was only necessary, he said, to compare any department of the curriculum as it was 30 or 40 years ago with what it is now, to perceive the enormously increased burden imposed upon the memory of a candidate for a medical degree. When he was a student less knowledge was required of chemistry, botany, practical anatomy, and the other fundamental studies. The practical studies had also become more extensive. While the student had formerly found difficulty with three, his colleague, the Professor of the Practice of Medicine, had this year placed in the hands of his pupils a printed list of *eight hundred* fevers. It was now impossible for any one mind to comprehend all the subjects brought under the notice of the students, and no time being left for observation or reflection, their professional education had become an effort of memory rather than a process of mental training. There were only two sources from which relief could be obtained, the regulations of the licensing bodies, and the conduct of courses by the teachers. The branches which surpassed all others in importance were practical anatomy and hospital instruction; but at present, with the multiplicity of classes and the frequency of examinations, there was neither time nor freedom of mind allowed for practical study. After 30 years' experience as an examiner he felt satisfied, that examinations afforded no trustworthy criterion of real knowledge. He had no hesitation in saying, that the present system of examinations should be entirely abandoned—1st. because insufficient for their professed purpose; 2nd, because they interfered with the acquisition of

real knowledge; and, 3rd, because the system of class-examinations through written questions and answers would afford far better evidence of professional attainments than the present plan. As to the remedy, he would make it imperative to pass the examination upon preliminary education, before beginning the strictly professional course; 2nd, he would prohibit the commencement of the latter course before a certain age; 3rd, he would require four years' practical study in a school possessing a large hospital and ample means of anatomical study; 4th, he would compel attendance on all classes that seemed to be really necessary; 5th, he would demand from every candidate for a diploma or degree a card of proficiency from his teachers; and, lastly, he would require the teacher to produce a syllabus of his course; and, if it should thence appear that he loaded his pupils' memories with indigested or indigestible details, or allowed an unruly hobby to carry him away from the field of practical utility into the regions of unprofitable speculation, or, still worse, taught doctrines not conducive to sound practice, he would endeavour to correct the evil by remonstrance, by censure, or, if necessary, by deposition. In the discussion which followed, Professor Christison stated his belief, that there was a distrust throughout the profession generally of the present system. He thought too many examinations were opposed to calm study and reflection, and were, after all, a feeble test of a man's ability as a practitioner. In the practical departments he did not think that a candidate could be too well examined, but it was a great hardship to subject students throughout the practical course to examinations which rendered it necessary for them to keep up the mere details of their fundamental studies. Professors Lyon Playfair, Balfour, and Bennett, Drs. Andrew Wood, Sanders, and Burt, President of the College of Physicians, and Mr. Benjamin Bell, President of the College of Surgeons, Edinburgh, also took part in the discussion, and various remedies were suggested for the evils mentioned in Professor Syme's paper. The proceedings terminated with a cordial vote of thanks to Professor Syme.

ROYAL SOCIETY.—The anniversary meeting of this society was held at Burlington House on Monday, November 30th, when the officers and council for the ensuing year were elected as follows:—*President*, Major-General Edward Sabine, R.A., D.C.L., LL.D.; *Treasurer*, W. Allen Miller, M.D., LL.D.; *Secretaries*, William Sharpey, M.D., LL.D., and George Gabriel Stokes, M.A., D.C.L.; *Foreign Secretary*, Professor William Hallows Miller, M.A.; *Other Members of the Council*, James Alderson, M.D., George Busk, Sec. L.S., Colonel Sir George Everest, C.B., Hugh Falconer, M.A., M.D., John Hall Gladstone, Ph.D., Joseph Dalton Hooker, M.D., Henry Bence Jones, M.A., M.D., Professor James Clerk Maxwell, M.A., Professor William Pole, C.E., Archi-

bald Smith, M.A., Professor Henry J. Stephen Smith, M.A., the Earl Stanhope, P.S.A., D.C.L., Professor James Joseph Sylvester, M.A., Thomas Watson, M.D., D.C.L., Professor Charles Wheatstone, D.C.L., and Rev. Professor Robert Willis, M.A. At the same time medals were presented to Professor Sedgwick for his observations and discoveries in geology; to the Rev. M. J. Berkeley for his studies in botany; and to Mr. J. P. Gassiot for his researches in electricity.

TESTIMONIALS.—A testimonial, consisting of a handsome tea and coffee service, has been presented to Dr. West by the lecturers of King's College for the satisfactory manner in which he has performed the duties of Professor of Midwifery, during the illness of Dr. Priestley.—A purse of money and a case of surgical instruments, of the total value of £45, have lately been presented to William Oxley, Esq., M.R.C.S., as a testimony of personal regard, and of appreciation of his services during the seven years in which he held the office of house surgeon to the Huddersfield and Upper Aggbrig Infirmary.

PRESENTATION OF A NEW HOSPITAL TO BIRKENHEAD.—The new hospital, which has been built at Birkenhead at the sole expense of John Laird, Esq., M.P., has recently been opened for the reception of patients. The hospital, which is a fine structure, is built of the most durable materials, viz., brick and Stourton stone, no cement being used. It is placed in a situation which overlooks a public park of 180 acres, which must always be kept open. As much stress has been laid by the best authorities, including Miss Florence Nightingale, on the construction of hospitals, against the use of absorbent material for walls, ceilings, and floors, the walls and ceilings of the new building are covered with Parian cement, which forms a polished and completely non-absorbent surface. The floors of all the wards of the operating-room, the corridors, water-closets, bath-rooms, and lobbies, are laid with polished oak. The stairs are constructed of stone. It was announced during the proceedings that Mr. Thos. Brassey, contractor, had forwarded a cheque for £500, to pay for the land upon which the hospital has been built.

MEDICAL APPOINTMENTS IN INDIA.—Dr. A. C. Macrae, has been appointed surgeon to his Excellency the Viceroy and Governor-General of India, and has left Calcutta to join his Excellency at Lahore. Dr. Beatson, hitherto officiating as surgeon to the Governor-General since his departure from the Presidency to the upper provinces, succeeds to the civil surgeoncy of Simla. The Governor of Bombay has appointed Dr. Forbes a commissioner, with instructions to devote his exclusive attention to questions regarding the improvement and extension of the cultivation of cotton and the invention and manufacture of cotton-cleaning machinery, on a salary of 1,600 rupees per month. Sir John Lawrence, the new Governor-

General of India, has appointed Dr. Hathaway, who has already filled the important posts of Inspector-General of Prisons and Special Sanitary Commissioner, during the outbreak of cholera at Mean Meer, to be his private secretary.

ROYAL COLLEGE OF PHYSICIANS, LONDON.—At a general meeting of the Fellows, held on the 22nd instant, Dr. Hamilton Roe, Dr. Monro, Dr. Barker, and Dr. Herbert Davies, were elected members of council for the ensuing year. At the same meeting, Dr. Francis Hawkins was elected an examiner in the subjects of General Education.

GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION OF THE UNITED KINGDOM.—The changes which have been lately made in the constitution of the Council are very great. In the place of Mr. Lawrence, Sir Charles Hastings, and Mr. Teale, of Leeds, three of the Crown nominees, the following gentlemen have been appointed by Her Majesty, with the advice of the Privy Council:—Dr. Quain, Dr. Parkes, Professor of Hygiene at the Army Medical School, and Mr. Rumsey. The two former are both M.D.'s of the London University, the influence of which will be consequently increased in the Council, that of the College of Surgeons being proportionately diminished. Mr. Rumsey is a surgeon in good position at Cheltenham, and is the author of some valuable works upon social science and sanitary reform. The recent lamented decease of Mr. Green, the President of the Council, creates another vacancy. It appears highly probable that the choice of a president by the Council will fall upon Dr. Watson, the President of the College of Physicians, than whom a gentleman better fitted for the post could not be found.

SUBSCRIPTION FOR DRs. FRASER AND ANDREWS.—The amount subscribed up to the present date, December 28, is nearly 200*l.*, and we hope to learn of a considerable increase in the course of a short time. The lawyer who acted for Mrs. Symm, in the case of *Symm v. Fraser and Andrews*, has written a letter to the *Times*, stating that the defendants' costs, after being taxed, have been duly paid by the plaintiff, Mrs. Symm. We need scarcely observe that in a case of protracted litigation like that under notice, many expenses must arise which cannot be included in the ordinary costs. It is only right that these expenses should be prevented from falling upon the defendants in this vexatious and groundless action, and if the subscriptions should exceed the sum requisite to defray them, the balance could not be better applied than in the purchase of some testimonial to Drs. Fraser and Andrews, as a mark of sympathy for the unfair manner in which they have been subjected to legal proceedings, and held up to public obloquy until they had the opportunity, in open court, of proving the groundlessness of the charges brought against them.

FOREIGN HONOURS TO ENGLISH MEDICAL MEN.—Mr. Lawrence

has been elected a corresponding member of the institute, by the Academy of Sciences at Paris. Dr. Hughes Bennett has been elected an honorary member of the Royal Society of Medicine at Belgium.

VACANT CORONERSHIP.—The office of Coroner for the Midland Division of the county of Stafford is now vacant. We are pleased to learn that Dr. Robert Wollaston, Physician to the South Staffordshire Infirmary, is a candidate for the office; and we trust that, with the hearty co-operation and support of the medical men residing in Staffordshire, another name may be added to the gradually increasing list of medical coroners.

OPPOSITION TO THE PROPOSED AMENDMENTS IN THE MEDICAL ACT.—A numerous meeting of owners of patent medicines was held on the 8th instant, at Anderton's Hotel, Fleet Street, for the purpose of adopting measures for opposing in the ensuing session of Parliament the insertion of clause 57 in the Medical Act. Mr. R. Barclay occupied the chair, and stated that if the General Council of Medical Education succeeded in engrafting upon their present Act the contemplated clause, its effect would be to render valueless some 2,000,000*l.* of invested property now regarded as a sort of copyright, and which, in fact, is the sole maintenance of some thousands of persons. A committee was appointed armed with the necessary powers for resisting the passing of the proposed Bill, and nearly 3,000*l.* were subscribed towards raising a fund for defraying the expenses.

PRESIDENCY OF GUY'S HOSPITAL.—At a general court of the governors, held on the 16th instant, the Right Hon. Sir Lawrence Peel was unanimously elected to the office of President of the Hospital, in the place of the late Bonamy Dobree, Esq.

VALUABLE ADDITION TO THE LIBRARY OF ST. BARTHOLOMEW'S HOSPITAL.—Within the last week, Dr. Latham has presented to the library of St. Bartholomew's between fifty and sixty volumes of manuscript notes of cases which were under his charge during the seventeen years in which he occupied the post of physician to the hospital. The notes were taken by his clinical clerks, many of whom are medical officers of St. Bartholomew's and other hospitals, whilst others, as Dr. Roupell and Dr. Baly, are now dead. The chief present value, however, of these notes consists in the fact of each volume, as it was finished, having been carried home by Dr. Latham, who first studied it, and then wrote an index to it—a work which must have cost very much time and trouble, but not too much for the object in view, namely, that it should present an accurate epitome of the facts which each volume contained, and make all of them, pathological and practical, of easy reference. Dr. Latham's example is one well worthy of imitation by the physicians and surgeons of our large medical institutions.

HEALTH OF SCOTLAND.—The weather has been very close and moist, and typhus, typhoid fever, and diphtheria, have been prevailing over Scotland. Dundee Royal Infirmary has had two resident physicians cut off by typhus within four months, both being young men of high talent in their profession. One of them, Dr. Glen, who died first, had considerable literary and metaphysical ability and was the gainer, when at Edinburgh University, of Sir Edward Bulwer Lytton's prize for the best essay on *The Influence of the Mind on the Body in Disease*. Singularly enough, he was a candidate for the chair of anatomy in the University of St. Andrew's, and had a fair chance of it, but he died on the day of the election.

SYMM *v.* FRASER AND ANDREWS.—Had the verdict been for the plaintiff it would have been natural to look for a crop of actions of a similar kind, and medical men would have exercised their profession under a restraint most injurious to the sick and afflicted, and liable at any moment to be hauled before a judge for saving the life of a fellow-creature. The medical profession guards jealously its honour, and under the laws as they stand, there is a *maximum* of chances against any violation of the liberty of the subject from their conduct. It is as regards lunacy, or alleged lunacy, mainly, that the greatest watchfulness is demanded from the law; because an alleged lunatic has been taken away from friends and relatives, and literally placed in arrest. But in the case of patients suffering from transient delirium, the consequence of disease, the treatment to which they are subject goes on in their own homes, and under the eyes of friends who are cognizant of, and consenting parties to, the restraint demanded for the safety of others as well as the patient. The law should and does guard with vigilance personal liberty, but at the same time it should and does guard also a profession whose members are bound sometimes to direct that the actions of a patient should be restrained. Dr. Fraser and Dr. Andrews have suffered a pecuniary loss by being put on their defence, quite as much in the interests of their profession, and in the interests, we may add, of the public, as in their own interests; and we trust the suggestion that their brethren should subscribe to pay the costs of this action will meet with a ready response.—*Globe*. [The writer in the *Globe* seems to have curiously overlooked the fact, that if Drs. Fraser and Andrews have suffered by being put on their defence in the interests of the public, it is obviously the duty of the public, quite as much as of the profession, to join in the subscription which has been set on foot. His manner of dealing with the question of assistance to the sufferers reminds one of Sydney Smith's definition of charity—A wishes to relieve B, and tells C to give him a shilling.]

BEQUESTS.—Mr. Charles Rawlings of Chelsea, has made the

following charitable bequests:—To the Chelsea, Brompton, and Belgrave Dispensary, £500; City of London Truss Society, £500; Blind Institution, Euston Road, £200; and Westminster Hospital, £500. The Royal Hospital for Incurables has received a legacy of £2,000 from the executors of the late Joshua Field, Esq.

EFFECTS OF INDISCRIMINATE ENLISTMENT.—“The present rebellion in the United States,” says Dr. Hammond, “has opened our eyes to the evils flowing from the indiscriminate enrolment of men unfit, by reason of physical infirmities, to undergo the hardships incident to a soldier’s life.” And he states that in a hospital under his charge in the early part of the war, containing six hundred patients, he discovered at one time, on inspection, fifty-two cases of inguinal hernia.

PASS-LISTS.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

At a general meeting of the Fellows, held on the 22nd inst., the following gentlemen were admitted members of the College:—

Ringer, Sidney, M.D., London University College Hospital; and Smith, Eustace, M.D., London, York Street, Portman Square.

At a general meeting of the Fellows, held on the 14th inst., the following gentlemen, after due examination, were admitted as licentiates:—

Atkinson, John P., M.D., 2, Carlton Road West, New Peckham.

Close, Henry Ashlin, H.M. ship “Royal Adelaide.”

Fleury, Charles Robert, Peninsular and Oriental Company’s Service.

Harrer, Charles J. J., M.D., Vienna.

Haward, John Warrington, St. George’s Hospital.

Hayden, William Gallimore, High Wycombe.

Hewitt, William, Upton, near Birkenhead.

Hide, John, 1, Ebenezer Terrace, Turner Street, Mile End Road.

Hunter, John Charles, 30, Wilton Place, Belgravia.

Hyde, George Edwin, Worcester.

Jones, Thomas E., Llanasa, Flintshire.

Ranson, Wynne Staton, M.D., Wincanton.

Sheridan, John Wilton, Stowmarket.

Simpson, John Henry, Maidstone.

Skinner, David Shorter, Headcorn.

ROYAL COLLEGE OF SURGEONS.

On December 10th the following members of the College were admitted to the fellowship; the three first named were admitted after election, the others after examination:—

Alexander, C. L., Great Dover Street.

Brown, Richard, Brighton.

Penny, Henry J., H.M. Indian Army.

England, William, Winchester.
 Greenhill, Joseph R., Netley Hospital.
 Ilott, Edward, Bromley.
 Langdon, Thomas Charles, Winchester.
 Nesbitt, Francis Albert, Wolverhampton.

Admitted on the same day to the *ad eundem* membership:—

Robertson, John Charles George, Lunatic Asylum, Hanwell,
 L.R.C.S.E.

The following members of the College, after the necessary examinations, were admitted licentiates in midwifery, on December 16th:—

Amy, Frederick, M.D., Jersey.
 Andrew, J. Lawton, Mossley, near Manchester.
 Benson, J. Henry, Hornsey Road.
 Bullmore, C. Forrester, Falmouth.
 Cresswell, Alfred, Peninsular and Oriental Steam Navigation Company.
 Eaton, Frederick, Lansdown Road.
 Emanuel, Leonard, M.D., Inverness Road.
 Hayden, W. G., High Wycombe.
 Lydall, W. H., Westbourne Park Road.
 Mahon, G. A. D., Aspley Woburn, Beds.
 Ruddock, E. Harris, Woolwich.
 Shaw, C. E. M., Crewkerne.
 Stott, W. J., Haslingden, near Manchester.

APOTHECARIES' HALL.

On the 10th inst., the following licentiates were admitted:—

Fitzhenry, George, Brynmawr, Brecknockshire.
 Fox, E. L. H., University College Hospital.
 Hughes, David, Llangollen.
 M'Kenzie, J. J.
 Rooke, W. Foster, Scarborough.

At the same court, the following passed their first examination:—

Beckett, Francis Mears, St. Bartholomew's Hospital; Buckle, William Tarberville, King's College; and Smith, Henry Richard, Guy's Hospital.

Passed as an assistant:—

Clarke, Walter, Hereford Place, Commercial Road.

The following licentiates were admitted on the 17th inst.:—

Bartlett, J. J. H., Notting Hill, W.
 Caldwell, J. T., Knutsford, Cheshire.
 Cook, J., Warwick Street, W.
 Dickson, J., Colsterworth, Lincolnshire.
 Gray, W. J., Princes Street, W.
 Haire, J. H., Gosport.
 Hughes, R., Woodbridge, Suffolk.
 Lewis, W. T., St. Bartholomew's Hospital.
 McCaull, C. N., Wilton, Wilts.
 Rayner, William, Leeds.
 Ryder, D. H., Greenwich.

Symonds, W. N., Sprowston, Norfolk.
Tibbets, R. W., Ashton, Bristol.

Passed the first examination on the same day:—

Barrett, J. W., Guy's Hospital.
Lattey, Walter, St. George's Hospital.
Vise, W. F., Middlesex Hospital.
Wilford, J. G. F., Guy's Hospital.

December 24th. The following licentiates were admitted:—

Alfred S. Cooke, Gloucester.
Paulin Martin, Abingdon.
T. T. Steward, Wolverhampton.
W. Hanks, Snaith, Yorkshire.
Samuel E. Walker, Warwick.
J. R. Ruddock, Leeds.
W. H. D. Mence, Cambridge.
N. Levett, Grosvenor Place Schools.
P. J. Simpson, Gower Street.

The following passed their first examination:—

D. W. Tomlinson, St. Mary's Hospital; Josiah Paull, and C. E. M. Shaw, St. Bartholomew's Hospital.

MEDICAL VACANCIES.

HANTS, COUNTY ASYLUM, WINCHESTER.—For a surgeon, in the place of H. G. Lyford, M.D., F.R.C.S., resigned. Last day for sending in applications, January 12th. Election fixed for January 13th.

WARNEFORD HOSPITAL, LEAMINGTON.—For a House-Surgeon; salary £70 per annum, with board and lodging. Applications to be sent in before January 14th. Election on January 26th.

SURREY DISPENSARY, GREAT DOVER ROAD, S.E.—For a Surgeon, *vice* J. Croft, F.R.C.S., resigned. Applications to be sent to Mr. C. F. Mayhew, secretary, 10, Barge Yard Chambers, Bucklersbury, E.C.

PUBLIC DISPENSARY, CAREY STREET, W.C.—For a Resident Medical Officer, in the place of J. Makins, Esq., resigned; salary, £105, with unfurnished apartments. Election fixed for January 12th.

MEDICAL APPOINTMENTS.

ALLAN, W. W. Esq.—Medical Officer to District No. 1 of the Wharfedale Union, Yorkshire.

BOARD, Edward C., Esq.—House-Surgeon to the Bristol Royal Infirmary.

BRECKNELL, W. H. M.D.—Medical Officer to the Howorth District of the Gateshead Union.

BROWN, Frederick J., M.D.—Consulting Surgeon to St. Bartholomew's Hospital, Chatham.

CHAMBERS, T., Esq.—Assistant-Surgeon to the London Surgical Home for Diseases of Women.

CLARKE, F. W., M.B.—Medical Officer for District No. 5 of the Abingdon Union.

COOPER, Herbert, Esq.—Assistant House-Surgeon to the Royal Bristol Infirmary.

CROFT, John, Esq.—Assistant-Surgeon to St. Thomas's Hospital.

FRESHFIELD, A., Esq.—Medical Officer for District No. 1 of the Tendring Union.

GRAHAM, J., Esq.—Medical Officer to the Birmingham District of the Teesdale Union.

- GRANGER, W. S., Esq.—Medical Officer to the parish of Overmoigne, in the Weymouth Union.
- GRANT, J., M.D.—Resident Medical Officer and General Superintendent to the Dundee Royal Infirmary.
- HALL, Cornelius S., Esq.—Certifying Factory Surgeon, Carlisle.
- HARDISTY, James J., Esq.—Medical Officer to the Brookland District of the Romney Marsh Union.
- HILL, H., Esq.—Medical Officer, District No. 3, of the Worcester Union.
- JAMES, David, M.D.—Medical Officer to the parish of Dunbar.
- JONES, Walter, Esq.—Junior House-Surgeon to the Queen's Hospital, Birmingham.
- JORDAN, R. C. R., M.D.—Honorary Medical Officer to the Birmingham and Midland Free Hospital for Sick Children.
- MAIN, William, M.D.—House-Surgeon to the Alnwick Infirmary.
- NELSON, Samuel C., M.D.—Surgeon to Her Majesty's Household.
- NEWTON, H. W., Esq.—Medical Officer to the No. 1 District of the Newcastle-on-Tyne Union.
- OLDMAN, J., Esq.—Surgeon to the Huntingdon County Hospital.
- OLIVE, Eustace H., Esq., Medical Officer to District No. 6, Brixworth Union.
- O'NEILL, Timothy, M.D.—Medical Officer to the Ballyduff Dispensary District of the Lismore Union, Co. Waterford.
- RADCLIFFE, J. N., Esq.—Non-Resident Medical Officer to the National Hospital for the Paralysed and Epileptic.
- RADFORD, Thomas, Esq.—Medical Officer to the Rishangles District of the Hartismere Union, Suffolk.
- RICE, William, Esq.—Assistant House-Surgeon to the Liverpool Southern Dispensary.
- ROBERTS, E., Esq.—House-Surgeon to the West Kent General Hospital, Maidstone.
- ROBERTSON, John, M.D.—House-Surgeon to the Carlisle Dispensary.
- SALLERS, William, Esq.—Medical Officer to the Districts Nos. 1 and 2 of the Bury Union, Lancashire.
- SKAIFE, Henry, Esq.—Medical Officer to the Kilburn District of the Thirsk Union.
- SMITH, J. W. F., M.D.—Physician to the Royal Infirmary, Dundee.
- STEELE, James, M.D.—Medical Officer to the parish of Cambusnethan, Lanarkshire.
- TANNER, John, M.D.—Surgeon to the Royal South London Dispensary.
- WALKER, R., Esq.—Surgeon to the Carlisle Fever Hospital.
- WILLIAMS, Frederick, Esq.—Medical Officer to the No. 2 District of the Launceston Union.

DEATHS.

- BLOUNT, Samuel, Esq., Surgeon, late of Uxbridge, at Offord-road, Barnsbury-road, aged 73, on Dec. 16.
- BOWEN, S. S., M.D., at Tewkesbury, aged 37, on Dec. 7.
- BRAITHWAITE, Francis, Esq., Surgeon, at Hereford, aged 59, on Dec. 22.
- FITZ-GERALD, Fras. L., Esq., Army Staff Surgeon, at Carlisle-house, Kingstown, Dublin, on Dec. 7th.
- FLETCHER, John, Esq., Surgeon, late of Shiffnal, Shropshire, at Feltham, aged 82, on Dec. 2.
- GREEN, Joseph H., Esq., D.C.L., F.R.S., President of the Medical Council at Hadley, aged 72.—This distinguished member of the medical profession died on the 13th instant, at his residence, Hadley, near Barnet, Middlesex. He had for some months previously suffered from a severe attack of gout, complicated with disease of the heart. He received his professional education at St. Thomas's Hospital, as a pupil of his uncle, the celebrated

surgeon, Cline. Having become a member of the Royal College of Surgeons in 1815, he was soon afterwards associated with Sir Astley Cooper, in his lectures on anatomy and surgery, at St. Thomas's Hospital, and took the place of Henry Cline, a very promising young surgeon, who died in early life. The deceased was connected with St. Thomas's Hospital for more than 50 years, and was one of the most skilful and scientific surgeons of his time. In the year 1827 he operated on 40 cases of lithotomy, and lost only one. Mr. Green was for some years professor of anatomy at the Royal Academy, having succeeded Sir Anthony Carlisle in 1824. As a lecturer, no man in the metropolis addressed a class more eloquently, or was more successful in impressing the points of his subject upon the memory of his hearers than the lamented deceased. Mr. Green was a Fellow of the Royal and Geological Societies, D.C.L. of Oxford, Member of the Council of King's College, London, Consulting Surgeon to St. Thomas's Hospital, Member of the Council and Court of Examiners of the Royal College of Surgeons of England, and President of the General Council of Medical Education and Registration for the United Kingdom, all of which appointments are now rendered vacant.

GRIFFITHS, J., Esq., Surgeon, at Bangor, aged 29.

KEAL, J. T., Esq., Surgeon, at Oakham, Rutland, aged 31, after a short illness, on Dec. 13.

MOSS, W. C., M.D., from the effects of a fall from his horse, at Kirkstall, near Leeds, aged 31, on Dec. 9.

NORGATE, L. A., Esq., Surgeon, at Foxley Parsonage, Norfolk, aged 24, on Dec. 18.

PARKES, William B., Esq., Surgeon, at Inverness Terrace, Bayswater, aged 52, on Dec. 12.

POW, A., M.D., late Resident Physician at the Royal Infirmary, Edinburgh, at Dundas-street, Edinburgh, on Dec. 18.

LIST OF BOOKS, ETC., RECEIVED.

"On Surgical Diseases of Children." By T. Bryant, F.R.C.S.

"The Science and Practice of Medicine." Two volumes; second edition. By W. Aitken, M.D.

"On Skin Diseases of Parasitic Origin." By W. Tilbury Fox, M.D.

"On Uterine Therapeutics." By E. J. Tilt, M.D.

"On the Arcus Senilis." By E. Canton, F.R.C.S.

"On Australian Climates." By S. D. Bird, M.D.

"Elements of the Anatomy and Diseases of the Teeth." By H. T. Kempton, F.L.S.

"A Manual of Ophthalmoscopic Surgery." Third edition. By Jabez Hogg, F.L.S.

"Traité des Tumeurs de l'Orbite." By M. Demarquay.

"Special Therapeutics." By J. C. L. Marsh, M.D.

"The Diagnosis and Treatment of Diseases of Women." By Graily Hewitt, M.D.

"On the Distribution of Nerves to the Elementary Fibres of Striped Muscle" (2 fasciculi); "On Deficiency of Vital Power in Disease," (pamphlet); "On the Formation of the so-called Intercellular Substance of Cartilage," (pamphlet). By L. J. Beale, M.B., F.R.S.

"Illustrations of the Use of the Ophthalmoscope," (pamphlet); "Report of Calcutta Eye Infirmary," (pamphlet); "On Special Hospitals," (pamphlet). By W. Martin, F.R.C.S.

"Notes on Clinical Medicine," (pamphlet). By W. F. Wade, M.B., B.A.

"The Journal of Mental Science," No. xlvii. (exchange copy).

"Thirty-Sixth Annual Report of the Royal Asylum for Lunatics, near Perth," 1863.

THE MEDICAL MIRROR.

FEBRUARY, 1864.

ORIGINAL COMMUNICATIONS.

On some Cases of Tracheotomy, with Observations on its Employment in Diphtheria. By HENRY SMITH, Esq., F.R.C.S., (by Exam.) Asst.-Surgeon to the King's College Hospital; Consulting Surgeon to the Westminster General Dispensary, &c.

ON two former occasions I read before the Medical Society of London a paper on the subject of Tracheotomy, and they were so favourably received by the Fellows, that I hesitate not to make some further observations in connection with this operation. I have, however, been more especially induced to do so for three reasons. In the first place, I have still been devoting much of my attention to cases where this operation has been called for. In the next place, the uncommon frequency of throat diseases, and more especially of diphtheria of late, has of necessity attracted more attention towards the means of saving life by operation. And thirdly, the employment of laryngoscopy, a means of diagnosis and prognosis so useful to the surgeon in instances of laryngeal affections, adds another element of great interest to the subject. In my first paper I considered the subject of tracheotomy in relation to the treatment of croup; whilst in my second, the difficulties and dangers of the operation itself, and the best methods of performing it were discussed. I propose in this present essay to detail some cases which eminently show the value of the operation as a means of preserving life, and to discuss briefly the question of opening the windpipe in cases of diphtheria.

It must be evident to all those who are acquainted with the history of surgery, that the operation of tracheotomy

was little practiced, comparatively speaking, until a recent period. And it does not seem to have been held in much estimation by our forefathers. Thus the late Sir Charles Bell, in his "Operative Surgery," published in 1809, in considering the subject of what was then termed bronchotomy, states:—"I have been several times on the eve of performing bronchotomy, but I have never done it." And this is the case with many surgeons. It is scarcely possible now to meet with any hospital surgeon, of even a few years' experience, who has not performed this operation several times at least. I think I may say with truth, that I have performed it more frequently than any other single important operation in surgery, and in numerous instances I have been called to cases where, perhaps, the operation was warranted and justifiable, but where I have either refused or delayed it until it was too late. Our various hospital records prove that during the last few years the operation has been most extensively employed with the most gratifying results, and our standard writers on surgery, instead of speaking doubtfully about its employment, or confessing their practical unacquaintance with it, give it its proper place, recommend it with confidence, and show their familiarity with it equally with operations alike important. This is in a great measure owing to the advance of medical and surgical science generally; but doubtless the operation has been resorted to much more frequently lately in consequence of the great prevalence of inflammatory diseases of the throat. Moreover its success has been such in the treatment of croup, that it is with confidence recommended in this disease.

The greatest success by far met with after tracheotomy is in instances where the operation has been performed in young adults or middle-aged persons, either for urgent dyspnoea, dependent upon a sudden aggravation of chronic disease of the larynx, or some syphilitic ulceration of the same part. I think I may say with propriety, that in all, or nearly all, the instances where recovery has ensued after this operation, the morbid condition has been either of the two mentioned, whilst in the unsuccessful cases the disease for which tracheotomy has been performed was suddenly acute and idiopathic. I have repeatedly operated in cases where the patient has been suffering for months with symptoms of chronic disease of the air passages, perhaps, not sufficiently urgent to call for any particular attention; suddenly, from some exposure to cold, an acute attack has supervened upon the old mischief; the glottis becomes either spasmodically or mechanically closed, and the patient is placed in the most imminent danger, and life can only be

saved by tracheotomy. As I have before stated, these cases generally give the best results as regards rescue from immediate death, but, as one might have anticipated, it is not always possible for patients to dispense with the artificial opening, either for a long period or perhaps for life. Disease already having existed for a length of time has caused a permanent change about the entrance to the larynx, and a restoration to its original healthy condition may not occur. Instances, however, are not unfrequently met with where, even with this condition of pre-existing laryngeal disease, patients have been submitted to tracheotomy, and have been able to dispense with the tube a few weeks after the operation, under the influence of suitable treatment. This favourable result is, perhaps, met with more often in instances where the syphilitic poison has been the originator of the mischief in the larynx, and where subsequently to the operation, the patient has been subjected to the influence of specific remedies; but this good result occurs in other instances where no syphilitic history exists, and where no specific remedies are used; and, as an illustration of this kind of case and of the value of tracheotomy, I will briefly detail the following:—

A young married woman was brought into King's College Hospital, under my care, January 31, 1862. She had been suffering for some time with hoarseness and chronic cold, and had only been confined with a child about two weeks previously; after this, she being badly fed, and living in an unhealthy place, got an increased aggravation of laryngeal symptoms, and an acute attack developed itself, and when I saw her she was suffering severely from urgent dyspnoea. I ordered some remedies to relieve her, but about six hours after her admission it was evident that tracheotomy would alone save her life. I performed the operation, meeting with great difficulties therein, in consequence of very violent hæmorrhage, which could not be checked for a long time, and of the excessive action of the trachea; however, the relief to the dyspnoea was so great that the patient rallied wonderfully, and sixteen hours after the operation she was breathing easily and tranquilly. On the fifth day she could breathe without difficulty when the tube was stopped. There was no syphililic history whatever, and therefore she was only ordered quinine and good nourishment, great care being taken in keeping her in a warm and moist atmosphere. On the fifteenth day I took out the tube, and left the opening to heal up by itself. She breathed with ease.

On the twenty-sixth day after the operation the wound had quite healed, and the patient was in a fit condition to

leave the hospital. She could breathe with perfect freedom, but she had only partially regained her voice, speaking hardly above a whisper, thus indicating that the pre-existing disease with which she had suffered for eighteen months at least had produced some structural alteration about the vocal chords, and therefore it was fortunate that she could dispense with the tube so early. I regret very much that I did not have this woman's throat examined by the laryngoscope, but at this time our attention had not been drawn to the value of this instrument in such cases as it has been during the last year.

This case is typical, as relates to the value of the operation in the instances referred to, and its issue was remarkably successful, considering that the patient had been reduced by long illness and recent parturition, and moreover the difficulties in the operation were unusually great.

I will now detail a case of a somewhat similar character, but much more severe, in which tracheotomy rescued the patient from impending death, but where the long-continued previous disease, both in the air passages and the lungs, had produced such organic changes that, as yet, the patient has not been able to dispense with the tube altogether. This case will be seen, not only to illustrate the value of tracheotomy, but it will specially serve to show how much we can be aided in the diagnosis, treatment, and prognosis of such cases by the use of that valuable instrument—the laryngoscope.

April 15, 1863, I was called by Dr. Vine, to see Mrs. P., a middle-aged married woman, who had been seized the previous day with great dyspnoea, the symptoms defying treatment and increasing during the night. It appears that she had been suffering for many months with symptoms more or less violent denoting much mischief about the air passages and lungs, and there had been such a profuse expectoration of purulent matter, as well as hectic and loss of voice that Dr. Vine had well-founded suspicions of there being a cavity or abscess in one lung, as well as some organic mischief about the upper part of the larynx. When we arrived it was evident there was no time to enter upon any speculations as to the real nature of the disease, for she was in the most urgent distress, and rapidly dying from obstruction to her breathing. I immediately opened the trachea without difficulty, and introduced a double tube. A large quantity of thick membranous secretion was coughed up, and after this the breathing was easy and tranquil. Next day she was doing very well indeed, and the most rapid improvement ensued and continued, so that at the end of three weeks she was about her household duties, but not able to bear the tube closed for a moment.

As this patient, although rapidly improving and gaining strength, could evidently not dispense with the artificial opening, I wished to ascertain, if possible, the exact condition of the parts at the entrance of the larynx, and my colleague, Dr. George Johnson, who has paid much attention to the laryngoscope, took great pains in examining this patient for us, and a very correct view of the epiglottis and glottis was obtained; and the following morbid appearances were readily appreciated on May 19th, a little more than a month after the operation. "There was slight thickening of the epiglottis, and a warty projection on its margin, thickening of the mucous membrane, especially over the arytenoid cartilages, scarcely any movement of the cartilages during deep inspiration or attempts at speaking. Glottis not more than one-tenth of an inch wide during inspiration."

Now it was very evident, from this examination alone, that it was useless to attempt to close the opening, even for a short time. I heard nothing more of this patient until October 8th, when Dr. Vine kindly brought her to Dr. Johnson and myself, and we were much gratified with the patient's appearance. She had grown healthy-looking and stout, and was able to go for many hours together with the tube corked up, and then breathing easily, but she was afraid to dispense with it entirely. The examination by the laryngoscope at once revealed the cause of the improvement. "The epiglottis was in the same condition as before, but there was less thickening of mucus membrane; more movement of cartilages, and the glottis was at least the one-sixth of an inch wide instead of the one-tenth; the voice was still hoarse, and there was slight stridor during inspiration when the tube was closed. It is true that the progressive facility of dispensing with the artificial opening for a time was sufficient to show that the patient was gradually getting into a better condition; but at the same time the great value of a laryngoscopic examination was shown here, for by it we were enabled to ascertain the exact amount of improvement which had taken place in the condition of the larynx, and to give a favourable prognosis. It is most probable that if great care be taken this patient will ultimately recover the entire use of her larynx. Before leaving this case I may call attention to the satisfactory and rapid recovery after the operation, notwithstanding the extraordinary amount of disease which had existed for many months, and the presence of which precluded Dr. Vine and myself from supposing that the operation would do more than granting the patient a respite of a few weeks or months at the most.

I will now relate another case, because it illustrates the

value of the operation of tracheotomy in the other class of cases referred to, viz., where the larynx has been involved in syphilitic ulceration for some time, and then suddenly serious mischief has occurred, involving an operation. These cases, as I have stated, as a rule, do well, if the patient be not advanced in life, or the subject of diseased kidney. I have seen some admirable recoveries in such cases, and very few deaths. I relate this case also, because it illustrates the use of the laryngoscope, not only as a means of prognosis and treatment after operation, but as valuable in determining an operation.

A middle-aged married woman was admitted into our hospital, June 8th, under Dr. Johnson. About two years since she had contracted a sore, which was followed in six months by a scaly eruption, cough, hoarseness, and loss of voice, the latter two symptoms having existed only for the last six months, but gradually getting worse until her admission. At this time there was much dyspnoea and laryngeal stridor, dusky face, percussion sound of lungs normal; on examination by the laryngoscope, there was seen "great swelling of mucous membrane over arytenoid cartilages and false cords, and slight congestion; no ulceration; the true cords are permanently in contact with each other, except at the back part, where there is a small triangular opening, through which the air passes in and out." She was ordered iodide of potassium. On the following day the dyspnoea had increased, and in the evening it was so great that tracheotomy was indicated, and performed very expeditiously by Mr. Antonini, the house surgeon. There was immediate relief. The patient was submitted to the action of mercury, and, June 15th, her gums were slightly sore. On the 19th, a laryngoscopic examination was made. There was much less thickening of mucous membrane; the glottis much more open. She was ordered iodide of potassium, gr. v, and gr. $\frac{1}{16}$ th of hyd. bich. three times daily. This woman improved so much, that on July 18th, the tube was removed, and the mercurial was given up, she having been slightly under its influence up to that date. On July 27th, another laryngoscopic examination was made, and it showed that "the swelling of mucous membrane had quite disappeared; the glottis is wide open, and the arytenoid cartilages freely moveable. The true cords are observed to be of a dull red colour, and to be somewhat uneven on the surface." This patient was discharged well on the 1st of August.

There cannot be a doubt that this poor woman was snatched from imminent death by a well-timed and well-executed operation; and in such cases we may, as I have

before stated, expect great and ultimate success, for tracheotomy serves the double purpose of immediately arresting death, and of allowing opportunity for a complete cure of the laryngeal disease, by the exhibition of anti-syphilitic remedies. The laryngoscope was of great value here, for it revealed *before* the operation such a condition of the parts as led to the supposition that tracheotomy would probably be required; and, after the operation, it showed how surely the parts were regaining their normal condition under the use of appropriate remedies; and, in consequence, a confident prognosis was entertained that ere long the tube could be left out.

The value of the laryngoscope, as an aid to the physician and surgeon in such cases, cannot be too highly extolled. Only within the last week Dr. Gibb informs me that he was called to two cases where he was able to determine upon the question of tracheotomy by this instrument—in the one case the operation being performed with success, in the other the examination showed that the operation was not needful.

A question of great moment is placed before us after an operation of tracheotomy, and that relates to the removal of the tube; and before the use of the laryngoscope that question was only decided by a series of painful experiments, but now an investigation by the laryngoscope will decide the question pretty readily. I can call to mind a case where I operated some years ago with success, but where there were great doubts, some months after the operation, about the propriety of removing the tube. The patient was a man in his prime, and a very valuable life, and great anxiety was caused both to himself and his friends by the uncertain opinions which were given by the most eminent men in our profession,—some of them promising that in course of time the tube could be removed; others, amongst whom I may mention Mr. Fergusson, stating that it could not be done with safety. This gentleman lived for some years, always wearing the tube; ultimately dying of disease of the lungs and trachea. On post-mortem examination I found extensive thickening of the arytenoid cartilages, and a permanent narrowing of the glottis, which, had it been ascertained by the laryngoscope, would have at once allowed us to give a confident prognosis that the tube could not have been removed; and both the patient and his medical attendant would have been saved much needless suffering and annoyance.

[To be continued.]

Clinical Remarks on Cerebral Disease in Children. By T. HILLIER, M.D., B.A., M.R.C.P., Physician to the Hospital for Sick Children; Medical Officer to the Skin Infirmary, University College Hospital; Medical Officer of Health, St. Pancras.

It is now tolerably well understood that rapid serous effusion into the ventricles of the brain is nearly always dependent on acute tubercular disease of the cerebral meninges; hence the term tubercular meningitis is often used as synonymous with acute hydrocephalus.

It is not my intention, in this paper, to describe the appearances characteristic of this disease, but rather to give a sketch of some acute cases of cerebral disease, presenting features of comparatively rare occurrence.

The first case is an example of effusion into the ventricles, arising not from tubercular disease, but apparently having been a case of pure dropsy from venous obstruction.

F. H., æt. 9 months, was admitted into University College Hospital on the 16th July. No evidence of hereditary tendency to tubercle. He is his mother's first-born. She is only 20 years of age. At birth the child seemed healthy, and continued so for five months, except that, till 3 months of age, there was apparent weakness in the muscles of the neck. The child cut two teeth at 6 months, and was very strong for his age. At the age of 7 months, his mother was putting him to bed one evening, when he shivered all over and was very sick. The sickness lasted about a week; at the end of this time he had convulsions which lasted forty-eight hours. The mouth was drawn down to the left; the left eye was turned upwards and outwards; there was paralysis of the right arm and leg. From this time the child remained unconscious. For three weeks before admission there was much screaming and groaning. The head gradually enlarged, and became very markedly hydrocephalic. Before admission he had taken iodide of potassium without benefit. On admission, this treatment was continued, and a blister 12×8 was applied to the head.

On 2nd August the following notes were taken:—Lying on right side with head retracted, the body curved with convexity forwards; feet and legs extended; great toes drawn in beyond line of other toes, hands rigidly flexed, arms extended. The child constantly uttering a kind of grunt with expiration, and working left arm about. Eyes half open; tenacious mucus about lids; internal strabismus of right eye; pupils medium size, sluggish. Has four teeth. Gums are clenched firmly on the finger introduced into his

mouth. He appears to be quite blind. Anterior fontanelle distended; no pulsation. Head warm, not hot. Sometimes takes fluid nourishment eagerly, at others refuses it. Bowels usually act once a day; motions slate-coloured, very offensive. Spirit lotion to be applied to head.

The child became gradually weaker, and died on 12th August.

Autopsy. Six hours after death. Weather dry. Convex surface of brain pale, except posteriorly, where the larger vessels are injected (from position). Convolutions flattened, sulci opened out. In removing the calvaria, brain substance ruptured, and a quantity of clear fluid allowed to escape. *Lateral ventricles much distended.* Roof of the ventricles rather tough. Foramen of Monro large enough to admit thumb readily. Septum lucidum thin and quite perfect. Ventricle of the septum large. Surface of corpora striata presents a mammillated aspect; the elevations look soft, and can be felt by finger. It would appear, however, more as if the corpora striata were depressed by sulci, and hence elevations produced, than as if there had been abnormal deposit on them. There are some large vessels ramifying on the surface of these bodies. There is no softening of the floor of the ventricles, or of the fornix, or of the commissures. There is more difficulty than usual in drawing back the velum interposition owing to the firmness of the large veins entering into its structure. The corpora striata and optic thalami have a less rounded outline than usual. The left thalamus has a transverse depression near its centre from before backwards; the posterior portion is pinker than normal. On removing the brain from cranium, a portion of the membranes, with a thin layer of brain attached, is left adherent to the neighbourhood of the left spheroidal fissure. On the posterior surface of the middle lobe, on left side, is a vessel distended with what appears to be clotted blood, undergoing the changes commonly met with in blood effused during life. The coats of the vein are not thickened; the clot is partly yellow and partly pink. The vein leads to one of the sinuses near the torcular Herophili, where is also a decomposing clot. In the other sinuses there is much clotted and some fluid blood. The membranes at the base of the brain do not tear readily, but their toughness appears to be entirely due to vessels entering into their composition, which are tougher than usual; the intermediate parts are thin and transparent. There is no granular appearance *at the base or in the Sylvian fissures*, or any *inflammatory exudation around the optic tracts, the origins of the cranial nerves*, or between the middle and posterior lobes. On the wall of the posterior cornua of the

lateral ventricles there is a peculiar yellow discoloration, having an irregular outline, and reticulated and irregularly stellated; it appears a little raised above the surrounding portion of the walls, and is surrounded by slight vascularity. *Fourteen ounces of serum* were collected from the ventricles; some was lost. Cerebellum, pons, and medulla oblongata healthy.

Lungs. *Left*; free from tubercle, emphysematous.

Right; the seat of lobular pneumonia in the middle and lower lobes. No signs of secondary deposits.

Spleen small, firm, and healthy.

Liver healthy. Kidneys very pale, but healthy. *Heart*: Right side full of black clot; clot in left auricle and ventricle. Valves and muscular structure healthy. *No trace of tubercle in any part of chest or abdomen.*

This case was mistaken during life for one of tubercular disease affecting the brain and its membranes. The sudden accession in perfect health is remarkable; the occurrence of rigors, which are rare in young children, is also noteworthy. The obstinate sickness was much like the early history of tubercular meningitis; and the occurrence of convulsions at the end of a week was quite consistent with this hypothesis; hemiplegia, though rarely met with, was not incompatible with this theory. When convulsions occur as an early symptom in tubercular meningitis, MM. Rilliet and Barthez state that there is generally found tubercle in the brain, as well as in the meninges. I have met with several exceptions to this rule. The slow after-progress of the case rendered the diagnosis of tubercular meningitis more unlikely; a duration of three months is quite exceptional in fatal cases of this disease. Tubercle of the brain itself has often a much longer course than this. The pathology of this case is not quite clear; it seems, however, probable that coagulation took place in the veins, and that serous effusion occurred from this obstruction to the circulation. What led to the coagulation it is not easy to say, whether phlebitis, or simple coagulation, such as often occurs in course of phthisis or after fever. The hardness of the central parts of the brain, in this case, is evidence, if any be needed, that mere soaking of those parts in serous fluid will not produce softening, such as is commonly met with in tubercular meningitis. I am not certain whether the state of the lining membrane of the ventricles was due to inflammation of that membrane, which is, we know, in many cases, a cause of intra-ventricular effusion. If this were so, our view of the case would be changed.

A case, such as the one just described, would be a favourable one for puncture. This plan of treatment was proposed, but the mother would not give her consent.

In the great majority of cases of tubercular meningitis there are premonitory symptoms indicative of failing health, especially loss of flesh, loss of colour, loss of spirits, or some change in natural disposition. Loss of appetite is a very frequent premonitory symptom. In the following case there were scarcely any prodromata.

H. C., aged 7 years. His father and mother were healthy, and there was no hereditary tendency to tubercle, so far as could be ascertained. He is the second of a family of five children. The eldest boy has been rather delicate, and a younger brother died twelve months before of whooping-cough. He had himself been in very good health till about the 1st May, 1863. When an infant, and being suckled by his mother, his father had a severe illness, which gave his mother much anxiety; at the age of eighteen months, he did not seem to be thriving, did not grow much, and had a large abdomen. Since that time he had become a strong and apparently healthy boy. Twelve months ago it was observed that he had a habit of frequently sighing, and priapism was noticed to an unusual degree. For some months past he had slept with his head drawn back, and he frequently put his hand to the side of his head to support it, but never complained of headache. He was not a precocious or peculiarly excitable child. He usually studied about two hours a day. For about a week before the end of April, he complained of soreness of his head, when it was brushed or combed. About the 1st May, he was sick in the morning on getting up; his tongue was furred; he had two aperient powders given to him, which acted freely; the sickness, however, continued for several days; he had *no headache*. The appetite failed, and on the 3rd there was a little feverishness. From the 4th to 7th May, the bowels did not act, but were freely moved by medicine on the 3rd. On the 7th, his pulse was observed to be under seventy beats in the minute. On the 8th, he became drowsy, his pulse was slower and a little irregular; towards night, he became restless and a little excited. His bowels were freely opened by a mercurial powder and senna. On the 11th, when I first saw him, he was lying in a very listless condition, but not liking to be disturbed. Head warm, not hot. Had been sick once during the day. Pupils of medium size, act normally to light. Pulse regular, about sixty in the minute. No strabismus, and no rigidity of any part. In the left infra-clavicular region of thorax, the percussion note is slightly dull, and expiration is prolonged. He knows his father, and at times speaks spontaneously. He is very slow in replying to questions, and sometimes does not answer simple questions. Small doses of calomel were

given frequently, and tartar emetic ointment was applied to the head.

12th.—Worse; quite unconscious. Passing motions in bed very freely. Slight strabismus. During the night he was very weak and low. Some stimulant was given.

13th.—Worse. Comatose. Some rigidity of limbs and subsultus.

14th.—He died.

No post-mortem examination.

There is no doubt in my mind that this was a case of tubercular meningitis, although occurring in a child not known to be tubercular. All the symptoms were characteristic. The absence of headache is worthy of note, though not a very uncommon condition; constipation was not a marked symptoms. The duration (11 days) was short, considering the absence of prodromata and the comparative slightness of febrile symptoms.

The following case is an interesting one, from the circumstance that the patient recovered from two affections occurring at different periods, either of which might have been expected to prove fatal.

J. T., a girl aged 7 years and 9 months, was admitted under my care into the Hospital for Children on 5th May, 1862. In the previous autumn she had been a patient with empyema on the right side, supposed to depend on tubercular disease. Paracentesis thoracis was performed, and a fistulous opening established, which closed at the end of two or three months. She remained in good health all through the winter. On 24th April she lost her appetite for the first time, complained of pain in her head, and seemed listless. During the following week she suffered more pain in the head, took no food except a biscuit occasionally; she was very listless and apathetic, and was once sick. The bowels were confined. On 30th April she took powders of rhubarb and soda every night, since which the bowels have been open each day, but pain in the head has continued; she has also complained of pain in the eyes and in the bones, and has been occasionally sick after taking tea or small quantities of food. At night she has screamed frequently after being asleep for about half an hour; cries out for water to be applied to her head, and talks in an excited way about dying. On 3rd May said she saw things double.

May 5.—The following notes were taken on her admission. She is fairly nourished with fine brown hair, long eyelashes. Hands kept over eyes and forehead; she complains of pain in these parts. Objects to having her eyes open. Head not hot. Says she sees double. Pupils equal, act thoroughly

and equally. Face has rather the appearance of a person looking at a very strong light; at times, however, the child assumes her natural smile and an arch expression. Answers questions pettishly. Observes accurately and quickly. Tongue moist, clean at tip, coated on dorsum. Pulse varies from 64 to 72, feeble and regular. *Thorax*: The right side is very moderately contracted from the old empyema. The auscultatory signs are almost normal, except at the right infra-clavicular region, where percussion is dull and expiratory murmur prolonged and separated from the inspiratory. She cries out occasionally owing to flying pains about loins, hips, and elsewhere. Two leeches applied to each temple. Ice applied to the head. \mathcal{R} Calomel gr. ij. \mathcal{P} . Jalap gr. viij. in pulv. stat. sd.

May 6.—Leeches bled well. Passed a very restless night. Bowels open twice since taking the powder. Tongue moist, cleaner. Pulse 64 to 68, not quite regular. Pupils as yesterday. Very slight strabismus. No diplopia. Expression at times pettish, with occasional look of distress. From time to time she cries out, complaining of pain in head, eyes, or some part of the body. \mathcal{R} Hydr. Chlor. gr. i., ter die sd.

May 7.—Slight pericardial friction sound heard over the heart, for which a leech was ordered. Pulse 72, regular. General condition as before. No abnormal heat of skin.

May 8.—Better in all respects. Bowels open once. No pain to-day. To omit calomel; to take a citrate of potash mixture with excess of bicarb. potash.

9th.—Pain in head has returned. Pulse 84, not quite regular. Strabismus more marked. Slight friction sound still audible over fourth left cartilage.

10th.—Complains much of pain in left hip and left orbit. Pupils equal, rather small. Pulse 98, intermitting about every 10 beats.

12th.—Much the same, but pain is less.

13th.—Pain in left ear. Strabismus less marked. Pulse 120, more regular. Bowels regular. Sleeps well.

14th.—Pain less. Pulse 80, intermits about every 10th beat.

17th.—Seems more herself to-day, though at times complains of pain in both eyes.

19th.—Seems better. Pulse 120, regular.

\mathcal{R} Ol. morrhuae, ʒj ter die \mathcal{R} Syr. Ferri iodid. mxxv; pot. iodid. gr. j; aquæ ad ʒj, ter die.

May 22nd.—Much the same. There is still slight internal strabismus of right eye, and now also partial ptosis of that lid. At times suffers from severe frontal headache. Appetite moderately good.

June 1st.—Has been up and walking about the ward for

two days. She walks with very uncertain step. Has occasional cramps in left leg. Is cheerful, and quite intelligent. Strabismus as before.

4th.—Slept very little last night, complained much of headache. There is more strabismus. Tongue, when protruded, points slightly to left side. The features are very slightly drawn to the right. Appetite failing. Bowels open. Pulse 96, regular. Child's manner is heavier than it was.

5th.—Much the same. Pulse 96, not regular in force or rhythm.

7th.—Still has frontal headache. Strabismus continues. Deviation of features also. Bowels confined.

R Pulv. cal. c. rhei. gr. viij. st. at 8.

9th.—No headache to-day. Deviation of features to right still observable. Sight is decidedly impaired. Is more lively and cheerful.

14th.—Allowed to get up. Walks with feeble uncertain gait; no dragging of either leg. Sight evidently much impaired. Intellect perfect. Right pupil a little more dilated than left; it contracts readily on the application of a lighted candle, but soon dilates again whilst the light is still applied. The left pupil contracts, and remains contracted till the light is withdrawn. No pains.

19th.—Had a very restless night. Complains of pain in head. She at times has a kind of shudder, almost resembling a rigor. Does not seem worse this morning, except that the sight of right eye is less distinct than it was. She cannot distinguish persons' features at a few feet distance, even with both eyes open. She is cheerful, and amuses herself with toys. R Hydr. bichlor. gr. $\frac{1}{24}$; tr. cinchonæ m x; aquæ ʒj, ter die.

June 23.—The child seems quite well, but absolutely blind. Signs of consolidation at upper part of chest, on the right side, but no other active disease. A little later than this her eyes were examined with the ophthalmoscope, and it was found that the optic disc was quite pale and atrophied. The strabismus and deviation of muscles of face quite disappeared. The child seemed in very tolerable health, and was not troubled with headaches.

This case I regard as one of tubercle in the brain. The diagnosis, however, is not an absolutely certain one. The character of the pain in the head, the affection of sight, (that is to say, double vision at the outset, due probably to paralysis of the muscles of the eyeball, and subsequent gradual loss of sight), the character of the pulse, the temporary paralysis of one side of the face, with partial ptosis on the other side; all these symptoms point to the growth of some substance exerting pressure within the cranium. From the appearance

of the child, her previous history, and the condition of her right lung, there can be little doubt that she was of a tubercular diathesis, and that the growth within the cranium was of a tubercular character. I will not venture to speculate on its probable situation. Convulsions, a very common symptom of cerebral tubercle, but not a necessary one, was absent in this case.

Amaurosis, with atrophy of the optic nerves, is not an uncommon result of tumours in different parts of the brain and of the cerebellum, even when these tumours exert no pressure on the nervous structures concerned in vision. The most probable way of accounting for this condition is that suggested by Dr. Brown-Sequard, that by a reflex action the vessels nourishing the optic nerves are excited to undue contraction, the supply of blood is reduced and atrophy ensues.

It is not a common occurrence for tubercle in the brain to undergo retrograde changes, and the disease to be arrested; but MM. Rilliet and Barthez found cretification occurring in two out of thirty-seven cases, and Dr. West observed the same condition once in nineteen cases of cerebral tubercle. That tuberculization of the bronchial and mesenteric glands is *very often* arrested in children there can be no question; indeed I consider it to be of constant occurrence. Nothing is more common than a deposition of tubercle in various organs as a sequel of measles or whooping-cough, and if these cases be properly treated a very large proportion of them recover. That the same may occur in the brain there is no reason to doubt.

In regard to the treatment of this case I do not ascribe the recovery to the use of calomel, but much rather to cod-liver oil and iodide of iron. If a similar case came under my treatment again, I should give cod liver oil, and at the same time resort to counter-irritation. I would give a nutritious diet, and act rather freely on the bowels by calomel and jalap.

Cases of Irido-Choroiditis, treated by Division of the Ciliary Muscle, with Remarks on the relative value of this Operation and Iridectomy. By HENRY POWER, Esq., M.B., F.R.C.S., Surgeon to the Royal Westminster Ophthalmic Hospital; Surgeon to, and Lecturer on Physiology and Comparative Anatomy at, the Westminster Hospital.

CASE I.—M. A. K., æt. 61, a fresh-complexioned woman, occupied as a housekeeper at Egham, in Surrey, called upon me on the 16th November, 1860. She stated that, in August of that year, she felt a burning sensation in the globe of the

left eye, and at night, on removing her spectacles the candles were surrounded with a deep red halo. About three weeks ago she had a violent bilious attack accompanied by vomiting, the consequence of eating meat that had been kept too long. The bilious attack commenced on Sunday evening, and on the following day the eye became exquisitely painful. She had medical advice for it, and was ordered leeches, warm poultices, and some medicine, which considerably relieved the pain. On going to bed, sparks and flashes passed before the eye, with waves of alternate light and darkness. Exposure to light did not materially increase the symptoms, but she had violent headache, and soon the dimness of vision became so strongly marked, that she could not see the largest objects. To-day (16th November), she can distinguish the position of the window and the bars of the window-frame, but no object in the room. There is not much present pain in the eye. Her health has been rather "delicate," but she has never had any serious indisposition, nor have the eyes ever been injured, or in any way inflamed, up to the date of the present attack. The conjunctiva of the left eye is muddy, but not much congested. The sclerotic very muddy, the circumcorneal zone of purple redness not very strongly marked, the cornea dim, and somewhat flattened. Aqueous humour distinctly turbid, making the blue iris appear of a greyish tint. Iris widely dilated, not quite circular, and perfectly immoveable. The vitreous humour was too hazy to permit the entrance of the optic nerve to be perceived. After some hesitation, she consented to have the operation for the division of the ciliary muscle performed, which was done on the 19th November. The globe was very tense, and on penetrating the sclerotic, the aqueous humour spirted out with much force. A small portion of the iris was accidentally cut, and protruded through the wound. Three days after the operation I opened the eye; the pupil was slightly elongated transversely, and there was a little blood in the anterior chamber. No improvement in the sight was observable, but she expresses herself greatly relieved by the operation, and more free from pain than for many days past. A few days afterwards, the general health having been in the interim carefully attended to and sustained, it appeared to me that the aqueous humour was clearing, and she was greatly pleased at the continued freedom from pain. I saw no more of her for a month, when on the 5th January, 1861, she called on me again stating that she had been gradually regaining the use of her eye, and she read in my presence No. 4 of Jäger's Test-types.

CASE II.—R. H., æt. 32. Admitted into the Westminster

Ophthalmic Hospital, May 14, 1863, with an attack of acute glaucoma. Is a carpenter by trade, and has been married fourteen years. He appears to be of a nervous temperament, and states that from his boyhood, though leading a steady and temperate life, he has been subject to periodical attacks of violent headache. He has also frequently suffered from carbuncles. His sight has always been imperfect and myopic. About three weeks ago he observed that the flame of a candle was always surrounded by a luminous halo, and, when reading, that the letters quickly became confused and misty. He purchased a pair of glasses, and for a day thought his sight was improved; but even then he was unable to read for more than half an hour at a time, on account of the pain attendant upon their use. For the last week he has been unable to see any objects with the right eye, and can only distinguish light from darkness. With the left eye he can still see to read No. 20 of Jäger's test-types at eighteen inches distance. During the last few days he has experienced severe shooting pains in both eyes, causing him to have restless nights and singularly disagreeable and confused dreams. The subconjunctival and sclerotic vessels are considerably congested in both eyes, but especially in the right, and in both there is a very distinct circumcorneal zone of redness. The cornea of the right eye is hazy. The pupils of both eyes are much dilated, and the irides, which he says are naturally blue, are of greyish or slate-colour. The humours are so turbid that no satisfactory examination can be obtained of the fundus. On the 15th May, I divided the ciliary muscle, after Mr. Hancock's method, in both eyes; he took an opiate at night and slept well. On the following day, being much depressed from the former pain and sleepless nights, he was ordered decoction of cinchona, with a little ammonia, three times a day, and good diet. On the 21st May, having considerably improved in health and spirits in the interval, his eyes were tried with the test-types, when it was found that he could read No. 6 at thirty inches distance with the left eye, and was able to distinguish large objects, as a white deal table, with the right. On the 4th July, he was able to read No. 4 with the left eye, and could distinguish the letters of No. 20 with the right. A few days afterwards, the pupils appearing somewhat dilated and acting sluggishly under the influence of light, I introduced a square of the Calabar bean paper. In half an hour the pupil had contracted to half its former size, and he was then able to read No. 2 with his left, but no improvement took place in the powers of vision of the right. He continued to have the Calabar bean paper placed in the eyes once or twice a week, and a month later stated

that he had been able, on the previous day, to read the leading article of a daily paper without pain or inconvenience.

CASE III.—J. D., æt. 32. Admitted July 31, 1862, with subacute irido-choroiditis in the left eye. The right eye has long been affected, and for the last four months he has been unable to distinguish light from darkness with it. The pupil of this eye is widely dilated, and quite fixed. The left eye began to be painful about five months ago, the sight at the same time beginning to be dim and confused, and he noticed himself that the globe was very hard, and felt as though it would burst. The sclerotic is not remarkably congested, nor is the pupil much dilated. Under the ophthalmoscope, the media are found to be tolerably clear; the optic entrance is cupped, and of a bluish tinge. The retinal veins are of large size and dark colour. He is just able to make his way along the street, but is unable to distinguish men from women. The ciliary muscle was divided the day after his admission; the vitreous was more fluid than usual, and a considerable quantity escaped. The section was also made on the right eye, though with little prospect of success. A week after the operation no improvement had taken place in the right eye, but the sight of the left was found to be much clearer. On the eleventh day after the operation he was able to distinguish men from women at a distance of thirty yards, and a day or two after could tell the time by a watch at sixteen inches. He had never been taught to read, and Jäger's test-types were not, therefore, tried.

CASE IV.—J. W. was admitted into the Westminster Ophthalmic Hospital, January 28, 1863, with chronic irido-choroiditis or choroiditis pigmentosa. He is a farm labourer at Lechlade, in Gloucestershire, and is thirty years old. Eight years ago his vision was perfect with both eyes. The left eye then became dim in the course of a few days, without assignable reason. In the course of the ensuing winter, he noticed a gradual improvement in the sight, but it became worse again in the following summer, when the right also began to be affected, and from that time to the present there has been gradual deterioration of vision, so that for some months past he has performed his ordinary farm work with great difficulty, and has ultimately been compelled to give it up altogether. He has often suffered from sparks and flashes of light, and for a long time past from *muscæ volitantes*. He married early (20), and has had for some years to maintain his wife and three children on his wages (10s. per week); he has rarely had meat to his dinner, and, considering the laborious nature of his work, thinks he has not had sufficient food to keep up his health and strength. At the same time,

he does not look ill-nourished; his face is ruddy and good-humoured, and he says he is regular and temperate in his habits. He complains of great dimness of vision, of pain in the eyes, especially on exerting them even for a short period, of black spots floating before them, and of the distorted appearance which almost every object presents, upright bars or posts appearing inclined from the perpendicular (about 15°), and circular objects, such as a half-crown, appearing as though a third or a fourth of their circumference were cut out, not, however, constantly above or below, and often varying in position, whilst his eyes are fixed upon the piece. He remarks that he has become long-sighted. On giving him Jäger's test-types, he was able to read No. 8 with difficulty, but could only make out the letters of No. 6 with much peering. His sight was not improved by either concave or convex glasses. On examining the left eye with the ophthalmoscope, the optic entrance appeared to be shaded off insensibly, without any line of demarcation, into the adjoining structures. The retinal vessels were not unnatural in size, form, or disposition, except, perhaps, that the arteries were rather smaller than usual. The choroidal vessels were very distinct, of vermilion tint lying upon a dark ground, and with numerous patches of dense black pigment scattered upon its surface, in some instances surrounded with whitish borders. The humours were tolerably clear, and no floating particles could be discovered. The condition of the right eye was essentially similar, but it was in a less advanced stage of disease. One large patch of pigment appeared to occupy the position of the foramen of Scemmering. Neither of the globes were extraordinarily tense, though both were resistant of pressure. On the 6th of February, I divided the ciliary muscle; the aqueous humour alone escaped. No pain or discomfort followed the operation. He was placed on full diet, and ordered $\mathfrak{m}\mathfrak{x}\mathfrak{v}$ of the sesquichloride of iron, and gr. iii of extract of hyoscyamus three times a-day. One month after the operation, March 8, he left the hospital, and he could then read No. 6 of the test-types with his left eye with ease, and, with a pair of concave glasses of 40 inches focus, he was able to read No. 2 with facility at a distance of 12 or 14 inches.

Remarks.—The cases above recorded are examples of the successful issue of Mr. Hancock's operation of dividing the ciliary muscle in cases of acute, sub-acute, and chronic glaucoma and irido-choroiditis. Having had frequent opportunities of comparing the results of this proceeding with the operation of iridectomy in these forms of disease, and as the whole subject may be said to be still under consideration,

I am desirous of expressing the opinion I have formed upon the relative utility of the two operations. There can, I think, be little question that either method may, under certain circumstances, be of extreme service to patients suffering from glaucomatous affections. The high authority of Professor Gräfe and of Mr. Bowman, and the happy effects with which iridectomy has been attended in their hands, would, even if unsupported by other testimony be sufficient to render it an established means of cure for this disease, and might also be supposed to indicate that want of success in other hands was attributable either to improper selection of cases for operation or a want of skill on the part of the operator. On the other hand, I am sure that Mr. Hancock is too faithful and practised an observer to have mistaken or misrepresented the effects of the operation which bears his name. Admitting, therefore, that in cases of true glaucoma both modes of operating may be successful, it seems to me the points for further inquiry are:—1. What are the relative advantages of the two operations; 2. Whether any common principle can be brought out from their comparison and consideration; and 3. What are the particular periods of the disease at which most benefit is likely to accrue from their performance.

If we compare the severity of the two operations, there is no question as to which should bear the palm of superiority, and, if it should be found hereafter that both are equally efficacious modes of treatment, I cannot doubt that Mr. Hancock's method will be most generally employed. In a very large number of Mr. Hancock's operations, both in his own hands, in those of Mr. Hogg and Mr. Rouse, and in mine, where the section has been made tentatively for many different forms of disease, I scarcely recollect to have witnessed any serious consequence that could fairly be considered as a sequence of the operation itself. The mere puncture of the sclerotic, with a clean knife, is but little liable to be followed by inflammation, if due care be subsequently taken; and thus, even if no good be effected, no harm is done, and the patient remains *in statu quo*. With iridectomy the case is widely different. Even when the surgeon is skilful, and the operation goes off smoothly and successfully, that is, when the iris is at once seized by the forceps and drawn out, it is, to say the least of it, a violent operation; the whole plane of the iris is dragged upon; the vessels are torn; and no slight damage done to its delicate structure; whilst, if any difficulty occur in the operation, as in those cases where three or four attempts are made before the iris is pinched up, which may happen even in the most practised hands, or where the forceps, or other instrument, is changed, or where, as may not unfrequently be observed, the

iris breaks away as though made of wet blotting paper, (rendering inadmissible the remarkable improvement in the mode of operating, suggested by Mr. Critchett, of Iriddesis,) the result is almost uniform. More or less hæmorrhage takes place; frequently large loss of the vitreous occurs, and the organ, except in rare instances, and by the fortunate result of subsequent operations, is irretrievably lost. Again, it is acknowledged on all hands that, in cases of acute glaucoma, the earlier operative proceedings are undertaken, the greater the chance of success; and in this point of view I think the division of the ciliary muscle is decidedly superior to iridectomy. Few surgeons, except those who have had special opportunities of observing and practising ophthalmic surgery, would care to undertake the somewhat complicated manipulations of the latter operation, requiring for their successful performance a steady hand, a good assistant, and a perfect knowledge of the anatomy of the parts concerned; whilst, upon the contrary, the simplicity of the former operation is so great, that it may be undertaken and accomplished with safety even by those who are wholly unaccustomed to operate on the eye; and, in case of emergency, no instruments, beyond a small tenotomy knife, or sharp-pointed scalpel, are required. The rapidity with which it can be performed, and the slight amount of pain occasioned, rendering the use of chloroform unnecessary, are also points in its favour.

In regard to the class of cases benefited, I believe them to be the same in both instances; that is to say, that both operations are successful in those cases chiefly, though not perhaps exclusively, in which abnormal tension of the globe of the eye exists. That the good effects resulting from later operations are attributable to the simple relief of intraocular tension, seems to me unquestionable, on the following grounds: first, because both are most effectual in the earliest stage of the disease, when the pressure is greatest, and has not yet lasted sufficiently long to produce serious organic changes, and both are successful in proportion as the tension is permanently relieved; and secondly, because when the disease has lasted for a considerable period, and many of its more marked characteristics have passed away, and especially in those cases where the eye has regained its normal tension, though perhaps with extensive structural lesions, I am convinced that little good can be accomplished by either mode of operating.

It is well known that the tension of the globe was not overlooked by the older writers, and that the cornea has been tapped, or (as I have frequently heard Mr. Guthrie

order) large numbers of leeches have been applied, with the object of reducing this very symptom. The results of tapping were, however, but transient, and for this reason; the puncture of the cornea was made with a needle, allowing the escape of only a small quantity of fluid, whilst it was always introduced in a manner that in other parts of the body would have been termed valvular, or obliquely through the laminæ. Immediate reunion consequently took place, and in a few hours the resecretion of the aqueous humour caused the intraocular pressure to be as great as before. I think both iridectomy and division of the sclerotic, in Mr. Hancock's method, provide, and this is their great merit, against this rapid reunion. In iridectomy, the wound, through the junction of the cornea and sclerotic, is of large size; and its edges are, so to speak, contused and lacerated by the introduction of the forceps. A portion of the iris almost invariably remains in the wound at the close of the operation, acting as a tent, permitting a constant weeping or discharge of the continuously secreted fluids, and, by thus relieving the intraocular tension, materially aiding the vessels in recovering their natural state, on the disturbance of which the whole train of symptoms appears primarily to depend. In like manner, in Mr. Hancock's operation, a direct (not valvular) incision is made through the sclerotic, which, either from the presence of some elastic tissue, or possibly from the contraction of the ciliary muscle, retracts considerably, so that the wound assumes an oval, fusiform, or elliptical shape, through which, after the escape of the aqueous, the vitreous humour commonly protrudes, and from this also a discharge, or secretion, may be observed to flow for some days. I believe that a similar incision in any part of the sclerotic would be equally efficacious, providing the same retraction of the lips of the wound occurred, and am not disposed to attribute any especial advantage to the division in this or that direction of the ciliary muscle, or indeed to the division of the ciliary muscle at all. At the same time I think that the point where Mr. Hancock makes his incision is wisely chosen, since it avoids injury to the retina, and permits the escape of the aqueous as well as of the vitreous humours, thus very completely fulfilling the indication of relieving tension, whilst it possesses the additional advantages of not occasioning any disfigurement, and of not being followed, as far as I have seen, by any tendency to protrusion or hernia of the contents of the globe through cicatrix. In fine, seeing that both modes of operating are followed by a successful issue, that they agree in only one particular, the relief of intraocular tension, a very marked feature of the disease: that their

happy effects are intelligible upon this principle alone, and that in considering them as both fulfilling this indication, Mr. Hancock's operation is by very far the most simple and harmless, I must express myself very strongly in its favour, and were I unfortunately the subject of glaucoma, I should unhesitatingly submit myself to that operation in preference to iridectomy, on the grounds of its being far less dangerous in its performance, equally intelligible in its mode of action, and, so far as my experience has gone, quite as satisfactory in its results.

Evidence against the Internal Use of Mercury in Syphilis and other Diseases. By CHARLES DRYSDALE, M.D., F.R.C.S. Eng., M.R.C.P. Lond., Honorary Secretary to the Harveian Society, and Physician to the Farringdon Dispensary.

IT may assist us not a little in attempting to discuss a question of such intricacy as that of the administration of a confessedly dangerous drug, which is supposed to act as an antiphlogistic in some diseases, and as an antidote in others, if we clearly recognise at the outset the difficulties we shall have to encounter in proving it to possess either of these properties. These difficulties are inherent in the experimental or empirical method of conducting therapeutical inquiries, and are so insuperable as to render almost all the results of such inquiries nearly valueless. We are at no loss to comprehend the *rationale* of administering a purge, such as Epsom salts or rhubarb, in disease, because we know well that these substances have the effect of purging human beings when in health. We use chloroform and opium on the same theory, experiments having been made upon individuals in health. Such drugs, with a few others, and with external applications added, constitute the great body of our true acquisitions in the department of drug therapeutics; but, when we come to the so-called specific or antidotal action of drugs, the difficulty of judging of results becomes enormous; and it is not from any want of labour on the part of past medical observers that we now possess so few specifics, but simply because of the enormous difficulty of the inquiry.

Perhaps quinine in ague is the only undoubted specific we possess, after all that has been said as to the powers of iodine in scrofula, sarza and mercury in syphilis, and recently of saracenia in small-pox, and hypophosphites in consumption.

Mr. J. S. Mill, in his "Logic" volume 1, in a chapter on the method of experiment, shows how little we can expect from

this line of inquiry in medical science. He remarks that in chemistry, or other true experimental sciences, "we introduce the agent into the midst of a set of circumstances, which we have exactly ascertained. It needs hardly be observed how far this condition is from being realized in any case connected with the phenomena of life. . . . Anything like a scientific use of the method of experiment in these complicated cases is, therefore, out of the question." Mr. Mill is of opinion, that medicine will not make much advance as a science, until we cultivate it by the deductive method, *i.e.*, by the study of general laws, or conditions of health, instead of so exclusively attempting to discover specifics for disease.

It will be my endeavour in this paper to show, firstly, that mercury possesses only one undoubted action on the healthy person, that of a purge; and, secondly, that all that has been said by the empiric school, as to its virtues as an antiphlogistic and antisymphilitic, has been proved, by an appeal to the very experience they invoke, to be entirely erroneous. Mercury is, then, a purge; but, as we possess so many other purges, we have no need to use mercury for that purpose, particularly when we know that some persons become salivated by very small doses of the drug. If, then, the profession had nothing further to gain from mercury than its purgative effects, it would probably not remain long in the pharmacopœia. But in London and Dublin, where the influence of John Hunter and Colles still holds almost undisputed sway, the virtues ascribed to mercury are very numerous. In fact, in the eyes of many, it is the most important of all remedies. In Paris, again, mercury has gone out of fashion in all maladies, save in syphilis and iritis, two specialities, the doctrines of whose therapeutics are left to syphilographers and ophthalmists, to the great detriment of the unity of medical science. In Germany and in Scotland, mercury is now beginning to be very generally looked upon as utterly useless; and in Edinburgh some of the leading professors have entirely abandoned its use in all diseases without exception.

The effects of mercury on dogs have been noticed by Dr. Desruelles, who, in 1827, at the Hôpital Val de Grace, in Paris, administered it internally and by inunction. "Among those which had the metal rubbed in, salivation was observed as in man; amongst all were observed the alterations which are commonly attributed to syphilis. The teeth were shaken and almost all loose; the buccal mucous membrane and velum palati covered with aphthæ; the stomach and pharynx red and congested." Mr. Skey has related his experiences of frequent phagedaena, produced by the use of mercury in

gonorrhoea in St. Bartholomew's Hospital. Mercury has been much praised in peritonitis; but Mr. Spencer Wells and Mr. B. Brown do not make use of it now; and our best surgeons have abandoned it in traumatic inflammations. In orchitis Mr. W. Cooke has shown how much better we may succeed without its use.

Mercury has been called a cholagogue; but experiments on dogs have recently proved it actually to diminish the biliary secretion. With regard to iritis, the experience of H. Carmichael of Dublin, of Dr. H. Williams of Boston (who of sixty-four cases of all its varieties, treated without mercury, had sixty perfect recoveries), of Dr. Hughes Bennett, and of Mr. Zachariah Lawrence, have, in my opinion, completely proved that injury, instead of good, results from the use of mercury; and Mr. Acton confesses that he thinks that iritis is frequently *caused* by the use of the drug.

Dr. Hughes Bennett says, "As to mercurials, the confident belief in their power of causing absorption of lymph, by operating on the blood, is not only opposed to sound theory, as formerly explained with regard to blood-letting; but is not supported by that experience which has been so confidently appealed to in its favour. They have been most praised in the treatment of serous membranes and of iritis; but more careful observation has demonstrated, that the moment these diseases are treated without mercury, they are uninfluenced (except in certain cases for the worse) by the drug." Pericarditis is another stronghold of the advocates of mercury, who in this case do not hesitate to salivate. Dr. J. Taylor, of University College Hospital, however, has completely put this question to rest by his careful observation of forty cases of this condition, in which salivation was employed. In most of the cases no abatement of the disease took place, when salivation was produced; in some the symptoms were aggravated, and pleurisy and laryngitis became added. In the few cases where the patient became relieved shortly after the employment of this dangerous remedy, salivation, the effect could only be attributed to the merest coincidence. With respect to that fatal disease, cholera, again, Mr. W. Sedgwick, Vice-President of the Harveian Society, informs me, that Dr. J. Ayres, of Hull, recommends gr. i. of calomel every five minutes as a perfect cure of the complaint. A woman, of 67, took over 200 grains (1854.) Dr. Taylor, near Liverpool, gave a girl in cholera, age 24, 1,160 grains. Mr. Sedgwick adds, that the mortality from the small doses of calomel in cholera was 74 per cent., and from large doses was 61 per cent.

Some practitioners in London recommend a grain of

calomel to be given every two hours in acute hydrocephalus, and are convinced that they have often saved lives by this experimental practice. It is difficult to ascertain what object they desire to obtain by this heroic practice; but the evidence of Dr. H. Roger, of Dr. Jenner, Graily Hewitt, &c., points to the conclusion that this disease is, when once fairly set in, inevitably fatal under all treatments. Dr. Hughes Bennett and others, too, condemn strongly the administration of calomel to the delicate children in which the disease generally occurs, as likely to lead to a fatal result.

The treatment of inflammatory diseases of the internal organs, such as pleurisy, pneumonia, and bronchitis, by means of mercury, now lingers only among physicians and practitioners who have long quitted the arena of medical debate, and retired into finality doctrines. One hundred and fifty consecutive cases of uncomplicated pneumonia recently treated by Professor Hughes Bennett in Edinburgh Infirmary, without either bleeding or mercury, have recovered, without exception. Had they been leeches or mercurialized, my experience of London practice tells me that a large per centage would have succumbed. In a debate at the Harveian Society, December 3, 1863, Dr. Pollock stated, that he believed he was giving the opinion of the profession when he said, that mercury was now considered quite useless in the treatment of pleurisy, pneumonia, or bronchitis; and Dr. Graily Hewitt stated that he did not believe mercury ever did good in any puerperal state, such as puerperal fevers or phlegmasia dolens. Dr. Walshe has recently informed me that he has never seen mercury of any service as an antiphlogistic; while he has very often seen it do much harm in inflammatory complaints; and Dr. Hughes Bennett is well known to be an avowed foe to the drug in all shapes and in all diseases.

Let us now turn to the citadel of mercury, to syphilis, and we shall find that the arguments which have appeared so conclusive, as to its value in that complaint are as unsound as those used by the advocates of mercury as an antiphlogistic. The origin of ulcers on the organs of generation and secondary eruptions consequent on these ulcers, is believed by M. Ricord, Mr. Syme, and many others, to be as ancient as the history of medicine, and I think all who will study the subject will come to the same conclusion. Celsus and the early writers did not know that there was any necessary sequence between the ulcers and the sore throat and eruption, which latter (as mercury was forbidden among the ancient nations, by legal enactments, and the treatment appears to have consisted of baths and external applications,)

do not appear, as we might expect, to have been so severe as to excite any great terror in the mind of the Latin or Greek authors, although they mention phagedæna of the ulcer. One of the most fortunate results of the British campaign in the Peninsula was the discovery by the medical officers that the disease which they were accustomed to think intractable to all but mercury, was treated with perfect freedom from bad results by the Portuguese medical men by means of diet, regimen, and external applications, without any mercury. Dr. William Fergusson wrote home an account of this in 1812, and at first attributed this in many of the Portuguese to constitution, &c. ; but he lived long enough to change that opinion, in 1846, when he recognised that the same treatment produced the same effect on all nations and in every climate. He mentioned that enormous quantities of the British troops suffered the most melancholy mutilations on account of being treated by John Hunter's plan of inunction. Mr. Guthrie, late President of the College of Surgeons, writing in 1817, says that "every sore, of whatever description it may be, will heal without mercury, provided that sufficient time be allowed Of nearly 100 cases which have been treated in this way (by external applications) all the ulcers healed without the use of mercury." Professor John Thompson, Surgeon to the Forces in Edinburgh, writes in 1818, "I have proved that chancres and buboes have, in every instance, disappeared under an antiphlogistic regimen, rest in bed, and mild local applications, as speedily as I have ever seen them do when mercury was used. The cases in which constitutional symptoms have supervened do not exceed one in ten, and the only forms of these symptoms which have presented themselves are ulcerations of the throat and cutaneous eruptions. These have been slight in comparison with those which usually take place in venereal cases after the use of mercury. They have all gradually, though sometimes slowly, disappeared without the use of mercury, and without seeming to have left any injurious effects behind them. Hitherto, I have not observed among patients treated for the primary symptoms without mercury, any of those deep or foul ulcers of the throat, of the skin, of the nose and mouth, or of the painful affections of the bones." Dr. Hennen, Surgeon to the Forces, says in 1818, that 407 cases of ulcers treated without mercury were followed only once by iritis and once by exostosis; only one in ten had any consecutive symptoms; and all of the latter healed in from ten up to eighty days, leaving the patients in perfect health.

Dr. Desruelles treated a very large number of cases of venereal ulcerations and secondary symptoms in the Hôpital

Val de Grace, (military hospital,) in Paris, from 1825 up to 1845, with low diet, extreme cleanliness, and simple external applications, with the greatest success; and, indeed, he says: "It is easy to see that the internal treatment is reduced to the greatest simplicity, the external is not more complicated; and for the one, as for the other, the help of pharmacy is almost nothing." In his "Lettres Ecrites du Val de Grace," 1841, he says that there have been 300,000 cases recorded, as having been treated without mercury. Dr. Fricke treated, from the year 1825 up to 1841, upwards of 15,000 cases in the Hamburgh Hospital, without mercury, by low diet, Epsom salts, and external applications; and in his "Annalen," published in 1828, he says that, among a number of cases treated thus without mercury, he observed neither iritis, nor alopecia, nor any case of bone disease, all of which were common when the mercurial treatment was used by him before 1825; and in the year 1848 he mentions that his convictions were strengthened by the numbers of cases he had treated rationally without mercury. The Government of Sweden caused all cases of venereal disease, and their treatment, from the year 1822—36, to be recorded. The result was an immense superiority in the case of patients treated by rational means and without mercury: 46,687 cases were observed and recorded. In 1833 there were reports published by the French Council of Health, and from the physicians and surgeons attached to the military hospitals in various parts of France. They all agree in stating the cures by mercury to be a third larger than by the other method. Between 1831—34, 5,271 patients had been treated. No case of caries occurred, and only one or two of exostosis.

In the history of all advances in social science, medicine, &c., there are periods of reaction, for the reforming party begin to abate in their zeal, and immediately the adherents of old doctrines recommence their assertions. Such has been the history of mercury in syphilis. M. Ricord founded a so-called *eclectic* school, and admitted that mercury did no good, and might do harm, in soft ulcers and in gonorrhœa, yet maintained that when sores became hard, there was no treatment adequate to the occasion but "six months of treatment with a daily dose of mercury, which influences the accidents we have to combat, followed by a three months' treatment of pot. iod." One of the few voices which has in this country been raised against this last reaction of the mercurialists, is that of Professor Syme, who, so late as 1856, in his "Principles of Surgery," says energetically, "A fearful system of scientific quackery has in recent times been founded on the

old mercurial delusion; and although the so-called *modified* use of mercury, which is at present so much the fashion at Paris and elsewhere, may not be so speedy in its effects, I can testify, from what has frequently fallen under my observation, that it empties the pocket and injures the health no less effectually than the process of poisoning, which it professes to have so advantageously replaced." Mr. Syme adds, that ulcers of the genitals, and their sequelæ, when treated carefully with cleanliness, external applications, and rational methods, constitute a mild disease, which would never have occupied much attention, had mercury never been admitted into the medical art, as an internal remedy. Professor Hughes Bennett is a strong anti-mercurialist, and in his "Principles and Practice of Medicine," 1860, he says, "The idea that mercury is a specific for syphilis, and the incalculable mischief it has caused, will constitute a curious episode in the history of medicine at some future day." So far does Dr. Bennett go, that he says he has never seen any case, even of rupia, "except in persons who have been subject to mercurial poisoning." Mr. Syme, Mr. Weeden Cooke, and Mr. Spencer Wells, all agree, that they have not seen such a thing as syphilitic bone disease where no mercury has been used. Professor Boekh, of Christiania ("American Med. Times," April, 1863), has, for the last ten years, made experiments with and without mercury, and his results give the complete verification of Fricke's account, namely, that primary ulcers, and secondary eruptions, took nearly double the time (sixty-two to thirty-eight days) when treated with mercury, than when treated with rational means; and besides this, the number of secondary symptoms were far greater where mercury was used (24:14).

Even in the year 1863, the direction of the American Northern States' army has been obliged to forbid the supply of calomel to the surgeons, from the excessive damage which it was reported to have caused to the patients; and Dr. Diday has, in a work entitled "*Histoire-Naturelle de la Syphilis*," shown the many distressing consequences which have followed courses of mercury in his own practice, and that of others of Ricord's school. Among his cases are to be found examples of extreme dyspepsia, salivation, apoplexy, and mania. Warned by such results, the present Parisian practitioners are now completely altering their practice; for in August, 1863, in a visit to Paris, I found that M. Cullerier, Dr. Fournier, and most others with whom I conversed, had abandoned M. Ricord's doctrine of treating indurated sores with mercury, and they await the eruption before commencing to give it; thus curtailing the amount of the drug administered enor-

mously. Diday, too, treats even the eruptions, in most cases, without the *specific*.

As to the disease called infantile syphilis, Hennen and others have shown that when persons are treated without mercury they very rarely have either abortions or syphilitic children; for, of thirteen children born of parents treated without mercury, eleven were born alive, and none of them had since their birth exhibited any suspicious symptoms, although some of them were in their third year; and Benjamin Bell says, "it is a common opinion that mercury causes abortion." Besides this, these so-called syphilitic children are far more successfully treated by rational means, as their parents also would be. Those who are sceptical on this point, are referred to cases published by the author in "The Medical Times and Gazette," of November, 1862; and to fifteen cases recently published in the same Journal (Oct. 1863,) by Mr. W. Allingham, F.R.C.S., Surgeon to the Great Northern Hospital, where fourteen recovered and only one died; whilst, where mercury is given, that gentleman shows that nearly 30 per cent. of these children die. Unless more can be said for mercury in syphilis and in inflammatory diseases, I, for one, shall not change my bad opinion of the drug, which I have never administered internally in any form for several years.

Suggestions respecting the Best Method of Establishing and Conducting a Village Hospital. By ALBERT NAPPER, Esq., M.R.C.S., &c., Surgeon to the Cranley (Surrey) Village Hospital.

THE deep and increasing interest manifested in this subject has elicited so many inquiries from ladies, medical practitioners, clergymen, and others, respecting the best mode of establishing, supporting, and conducting a village hospital, that I am induced to offer a few suggestions, founded upon the system which has stood the test of experience in the management of the village hospital at Cranley, not in the supposition that it is possessed of any peculiar merit, but rather as a basis upon which abler minds may mature a more perfect and enduring institution.

The first step is to secure a building suitable for the purpose, which, as I have stated in a former communication, (*vide* "Medical Mirror," No. 1,) needs to be neither costly nor elegant. To accommodate from six to eight patients, a small farm-house, or a double-tenemented cottage, having on the ground-floor, a kitchen, sitting-room, scullery, and larder, and upstairs, from four to six rooms, well ventilated, may, with a few inexpensive additions, be made to answer

all necessary purposes. Should it be contemplated to build an hospital, I would recommend a style of building very common in this district, which, for appearance, durability, warmth, freedom from dampness, and economy of construction, is surpassed by none. It consists of brick or stone walls for the ground floor, and timber, weather-tiled without, with lath and plaster within, for the upper part of the house; and were this style of building more generally adopted, many hospitals, upon whose construction such vast sums of money are uselessly squandered, might be built, and a liberal endowment secured from the building fund alone. The Cranley village hospital is mainly supported by the contributions of the neighbourhood, consisting of donations and small annual subscriptions; but, as about one-third of the outlay is met by the weekly payment of the patients, it leaves no heavy balance to be made up by the inhabitants of the district.

A most essential desideratum in an institution of this kind is a good nurse. There can be no question as to the superiority, in many respects, of one well trained, and possessing a competent knowledge of her duties; but, on the other hand, these advantages are frequently more than counter-balanced by an inordinate amount of conceit, and disinclination to conform to instructions that do not happen to accord with her preconceived notions; and where the hospital is near the residence of the medical officer, which, in every case, is most desirable, I am not sure that a sensible, untutored woman, who will strictly carry out the directions given to her, will not often be found the more efficacious.

The staff and the general arrangements of the hospital will be seen by a reference to the following rules:

Rule 1. The hospital is designed for the accommodation of the poor, when suffering from disease, or from accident; and shall be under the direction of three trustees, one of whom shall also be the acting manager.

2. The establishment shall consist of a regular nurse, assisted by an occasional female attendant, as often as her services may be required.

3. The nurse shall, at such times as her services are not required in the hospital, attend poor women at their own homes during their confinements, or other illnesses, on payment of the usual fee. (This rule is rarely acted upon, as the nurse can seldom be spared from her hospital duties.)

4. Patients shall be received on payment of a weekly sum, the amount of which, dependent on their circumstances, is to be fixed by their employer, in conjunction with the manager of the hospital.

5. Admission of patients shall be granted by the manager after consultation with the medical officer, to either of whom applications for admission may be made.

6. The medical department shall be under the control and superintendence of the surgeon.

7. The domestic arrangements shall be under the management and supervision of some of the ladies of the parish.

8. Every requisite shall be provided in the hospital, and patients shall not receive food or drink from any other source without the sanction of the medical officer.

9. The funds for the establishment and support of the hospital shall be raised by voluntary contributions, and the treasurer's statement of the receipts and expenditure (examined by the trustees) shall be printed once a year and forwarded to each subscriber.

10. All subscriptions shall be paid yearly, and in advance; and any of the officers may receive donations or subscriptions, an account of which shall be rendered to the treasurer.

11. The furniture and all other property of the hospital shall be vested in the trustees.

12. In the case of a vacancy, the remaining trustees shall elect another to make up the number.

The following are the principal articles of furniture required:—A kitchen-range, dresser, bath, easy chair, clock, common chairs, tables, &c.

Each bed should be provided with various necessities, as under:—A 3-foot iron bedstead, a horse-hair mattress, a wool mattress, a bolster, 3 pillows, 3 upper blankets, 2 under blankets, a quilt, 3 pairs of sheets, 2 pairs of pillow-cases, a commode, a deal locker, a rush-seated chair.

The cost of fitting up each bed amounts to about £9 10s. The total cost of fitting up an hospital for 6 beds is about £70.

THE NATIONAL PHARMACOPŒIA.—This long-expected work has at last made its appearance, but at too late a date to allow of our giving a detailed notice of its contents in our present number. The book, for which 10s. 6d. is charged, is a creditably got up octavo volume of nearly 450 pages. It is intended after a time, not stated, to bring out a cheaper edition at 6s. The policy of this arrangement is doubtful, and will cause great dissatisfaction. Those who are chiefly interested in the Pharmacopœia, and who will constitute the bulk of the purchasers, are persons who must buy the work at once, and who have already individually contributed a sufficient quota to the funds of the Medical Council, in the shape of registration fees, to entitle them to special consideration.

REVIEWS AND NOTICES OF BOOKS.

1. *The Diagnosis and Treatment of Diseases of Women, including the Diagnosis of Pregnancy.* By GRAILY HEWITT, M.D., M.R.C.P., Physician to the British Lying-In Hospital; and Lecturer on Midwifery and Diseases of Women and Children at St. Mary's Hospital Medical School. Pp. 628, 8vo. London, Longman and Co. 1863.
2. *A Handbook of Uterine Therapeutics.* By EDWARD JOHN TILT, M.D., M.R.C.P., Consulting Physician to the Farringdon General Dispensary, &c. Post 8vo., pp. 309. London, Churchill and Sons. 1863.
3. *Functional Diseases of Women; Cases illustrative of a New Method of Treatment through the Agency of the Nervous System, by means of Heat and Cold. To which is added an Appendix containing Cases illustrative of a New Method of Treating Epilepsy, Paralysis and Diabetes.* By JOHN CHAPMAN, M.D., M.R.C.P. Pp. 74, 8vo. London, Trübner and Co. 1863.

AMONGST the numerous modern treatises on the diseases incidental to the female sex, there are few which can be considered as equal to Dr. Hewitt's work, as regards both the soundness of the author's views and the admirable manner in which it is written and arranged, while the mass of recent information which it contains renders it, upon the whole, superior to any existing manual on this subject for the use of the student and of the practitioner.

It is divided into two parts; the first, and principal one, extending over more than four hundred pages, is exclusively devoted to diagnosis; the second contains a concise account of the treatment of uterine affections. As is the case with other books which are arranged after this plan, some objections might be raised to the division of treatment from diagnosis, but these are of minor importance when balanced against the great advantages which it affords for a natural and complete classification of diseases and their symptoms. Dr. Hewitt observes in his preface, that "very little consideration will show how completely subsidiary to questions of diagnosis are all others likely to present themselves to the student in his early attempts to investigate disease, of whatever kind, and wherever situate." Nothing can be more certain than this fact. Without a correct diagnosis the best remedies are useless, because their administration depends upon chance and not on selection. There is no class of diseases in which diagnostic knowledge is more important

than in that comprised in the book before us, and the author acts rightly in giving primary and chief attention to it.

The data which will be found serviceable in the diagnosis of female disorders may be arranged under two heads:—

1. Those obtained without physical examination of the patient; and, 2. Those which are obtainable by physical examination. The data belonging to the first section are considered in the following order:—Age of the patient; sexual relations; disorders of menstruation; unusual discharges of blood from the generative passages; substances expelled from the generative organs; discharges of non-sanguineous character; disorders of micturition; symptoms referable to the rectum; abnormal sensations referable to the generative organs, including pruritus, pain of various kinds experienced during menstruation or at other times, and referable to the internal and external generative organs; motions and pseudo-motions felt by the patient within the abdomen; and nausea and vomiting.

The value of the knowledge of the age of the patient must, unlike many other helps to diagnosis, depend entirely upon the truthfulness of the patient's statements. Even where no deception is intended, inaccuracies upon this point must occasionally creep in. Take the matter of pregnancy, for instance; we not unfrequently hear reports of women of the age of fifty and upwards having been delivered of children, but the probability of such accounts being true is very small when tested by statistics. Out of ten thousand cases observed by Mr. Robertson at the Manchester and Salford Lying-in Hospital, only fifty-one patients were confined who were over 45 years of age, and of this small comparative number only one had reached her 53rd year, and one her 54th year. In France, however, the possibility of pregnancy at the age of 58 has been judicially decided in one case. Dr. Montgomery says that no case of pregnancy, the particulars of which seem to him to be satisfactory, has occurred later than the 54th year; but he adds, that he by no means pretends to deny the possibility of such occurrences.

Certain facts, connected with the question of age, which are established on good authority, are that the predisposition to cancer of the uterus increases progressively and steadily with the age; that mammary cancer, schirrhous, is most common between the 40th and 50th years of female life; that fibrous tumours and fibrous polypi of the uterus are most frequently observed during the period of existence in which the uterus displays most functional activity, viz., from 20 to 45 years of age; and that encysted dropsy of the ovaries occurs usually between the ages of 20 and 40.

The circumstances of a woman's being married, particularly if she has borne children, or, on the other hand, leading a celibate life, is of much importance in the diagnosis of some uterine affections. Statistics show that cancer uteri is far less common in single than in married women, as is also ovarian cystic disease, according to most authorities, with the exception of Dr. Ashwell. Although Dr. Hewitt does not express any decided opinion on the question of the relative frequency of tumours of the uterus, he seems to lean to the belief that they are more often observed in unmarried women than in the married, so that his views apparently coincide with those of Dr. Henry Bennet, who, in a letter published recently in the "Lancet," has opposed the doctrine laid down by Dr. Routh, in the "Lettsomian Lectures on Midwifery," delivered in November last, to the effect that the opposite to this was the fact. In his reply to Dr. Bennet's criticisms, Dr. Routh adduces West and M'Clintock, both modern authorities, in support of his theory; and he also states that in 156 well authenticated cases of fibrous tumour of the uterus, 106 of the patients were married out of that number; and that out of 152 cases of polypus of the uterus, 135 occurred in married women. In order to arrive at a fair conclusion upon this question it is necessary, however, to bear in mind, as has been shown by Mr. Spencer Wells, that the relative numbers of married and single women vary considerably; for instance, according to the census of 1861, the proportion of the married to the unmarried women was as 100 to 39. The value of this fact, in connection with the question at issue, will be readily perceived.

The subject of menstrual derangements, with which may be considered that of hæmorrhages from the generative organs, is one of great importance, and worthy of the care with which Dr. Hewitt discusses it. A large section of the diseases peculiar to the female sex are closely connected with the menstrual function, and the diagnostic assistance to be derived from a knowledge of it is proportionately great. The deviations from the healthy standard may be divided into—1. *Minus* conditions of the catamenia, in which the discharge is absent, or less than usual; and 2. *Plus* conditions, as evidenced by unusual discharges of blood from the generative organs. The circumstance which renders the sudden absence of the catamenia, at a time of life when they are generally present, of so much importance, is, of course, the probability of pregnancy. The suppression may arise from exposure to wet and cold, from excitement or shock to the nervous system, from change of residence, and various other causes; but when the suppression has continued for three

or four months, the practitioner should always be guarded in his opinion until, by a proper examination into the case, he is in a position for giving an accurate diagnosis.

If, on the other hand, the sanguineous discharge be greater than usual, it is impossible, until after the diagnosis has been fully made out, to say whether the hæmorrhage be really of a menstrual character at all. It may occur from a miscarriage, or from the existence of different morbid states of the uterus and os uteri, such as cancer and polypus of the uterus, cauliflower excrescence of the os uteri, hypertrophy of the cervix uteri, and flexions of the uterus in various directions.

Few points connected with uterine diseases involve more difficulty in diagnosis than the expulsion of different substances from the generative organs. Dr. Hewitt remarks, and we fully agree with him, that great care must be exercised in receiving the statements of patients as to the nature of any particular substance which may have been expelled. Leaving out of consideration the fact that many persons have an object in making wrong statements, there are many who cannot correctly describe what they have seen, as, owing to various circumstances, it is difficult even for an experienced observer to distinguish the nature of the substances which are thus discharged. It is always advisable to place them in water for twenty-four hours, or longer, after which time it will be more easy to ascertain whether they are fleshy, membranous, or vesicular bodies, or only substances which, through either attempts at deception, or accident, are erroneously represented by the patient as having been expelled from the generative organs.

The diagnosis of cases attended by the existence of discharges of non-sanguineous fluid is very difficult, particularly when there is some suspicion as to whether the discharge is not due to a specific cause, *i. e.* to gonorrhœa; and too great caution cannot be exercised by a medical man when called upon to give his opinion respecting the specific nature of a discharge from the female generative organs. As Dr. Ashwell has observed, "It is always his (the practitioner's) duty to cure the disease, but rarely to venture upon an exposition of its nature. If he can positively affirm that it is of simple origin, let him do so, if suspicion has been aroused; if not, it is better to avoid any distinct allusion to the matter."

The disorders of micturition, from which diagnostic data bearing upon numerous affections may be derived, are either those in which micturition is possible, but difficult, painful, frequent, or involuntary, or those in which micturition is not possible, in consequence of retention and suppression of urine.

In dealing with this class of cases, it should be remembered that patients often exhibit singular reticence concerning them, as also in affections of the rectum, either from a feeling of excessive modesty, or from under-estimating their importance.

The abnormal sensations referable to the generative organs are described at considerable length. Under this head Dr. Hewitt includes pruritus (a very troublesome symptom), pain referred to the internal or external generative organs, and movements, or pseudo-movements, felt within the abdomen. By the term pruritus may be understood the whole class of symptoms in which the principal feature is an itching sensation; this may vary greatly in degree, from a slight creeping, uncomfortable feeling to severe and intolerable irritation. The chief morbid conditions which give rise to pruritus are local congestion (as in the earlier months of pregnancy), derangements of the digestive functions, chronic affections of the uterus, an acrid state of the secretions, aphthous inflammation of the vulva, warty growths in the urethra, thread-worms, and, in people of uncleanly habits, pediculi.

Pain referable to the internal generative organs may be connected with dysmenorrhœa, or it may occur independently of menstruation. In the latter class of cases the pain may be felt in the back, or in the hypogastric region; it may be intermittent, or more or less constant; of an inflammatory nature, acute and intense pain being present; and it may be associated with hysteria, or be accompanied by a bearing down, dragging sensation, and pains in the lower extremities.

Dr. Hewitt considers that, regarded as diagnostic of pregnancy, the alleged sensation of movements within the patient's abdomen have very little positive value, as nothing seems easier than for women, imagining themselves pregnant, to fancy that they perceive the movements of the child. This error in judgment is not limited to women who have had no previous experience in such matters; and there is much truth in Hamilton's observation, that "no woman ever yet fancied herself pregnant without also persuading herself that she felt the motions of the child." Besides the cases in which there is self-deception on the part of the patient, sensations of this nature may be present, owing to mechanical causes, such as abdominal tumours, retention of the menses, the distension of the intestines by flatus, and spasmodic twitching of the abdominal muscles.

The diagnostic data obtainable by physical examination are more satisfactory than those obtained without this aid, but they should not be used too exclusively for the purpose

of procuring information, nor should they ever be resorted to until other attempts at arriving at a correct diagnosis have failed.

Some idea of the difficulty to be encountered in obtaining a proper diagnosis from physical examination may be formed after a perusal of a carefully written chapter on tumours felt through the vaginal walls on digital examination, including pelvic tumours of various kinds. We can do little more here than enumerate the different causes from which tumour in this situation may arise. These causes are:—Distension of the bladder, and calculus in that viscus; cancer of the rectum, and distension of that part of the bowel by fæces; retroversion and retroflexion of the unimpregnated, or of the gravid, uterus; anteversion and anteflexion of the uterus; fibrous tumours growing from the posterior part of the cervix uteri, or from the uterus itself; general enlargement of the uterus, from any cause whatever; enlargement of the Fallopian tube, due to distension by serous or purulent fluid, or by blood, and Fallopian pregnancy; abdominal pregnancy; blood-tumours of the pelvis (peri-uterine hæmatocele); ovarian tumours; Wolffian cysts (enlargements of the cyst-like pedunculated structures attached at or near the extremities of the Fallopian tubes), and hydatid cysts; pelvic abscess; and osseous or other solid tumours growing from the pelvic walls.

Peri-uterine hæmatocele, or pelvic hæmatocele, is a term employed of late years to denote an effusion of blood in the neighbourhood of the uterus, giving rise to the formation of a tumour. The occurrence of hæmorrhage in this situation in females has been long known, but it is only recently that proper attention has been paid to it. This kind of tumour is usually rounded in shape, often well-defined, and generally limited to one part of the pelvis, especially the posterior and lateral parts. If examined soon after effusion has taken place, it feels soft; subsequently, it becomes harder; and still later, it will be found either to have become reduced in size, or to have undergone a softening process or liquefaction. The causes of this affection are:—Rupture of some of the vessels in the uterine or ovarian plexus, sanguineous congestion and rupture of the ovary, hæmorrhage from the Graafian follicle into the peritoneal cavity during menstruation, hæmorrhage from the uterus and Fallopian tubes into the peritoneal cavity, rupture of the foetus-containing cyst in extra-uterine pregnancy, rupture of hæmorrhoidal veins, hæmorrhage from the vessels of the peritoneum, and other sources.

The condition of the os uteri and of the uterus itself may

be ascertained by means of digital examination, or with the aid of the sound, or of the speculum. In making a digital examination it is especially requisite that the pathological conditions should be thoroughly understood, as without this knowledge the value of the diagnostic data which are derivable by this method will be entirely lost.

By the use of the uterine sound, introduced into practice by Dr. Simpson, of Edinburgh, the exact position and direction of the body and fundus of the uterus may be discovered, and these higher parts may, in most instances, be brought within the scope of digital examination, so that the existence of various important signs may thus be learnt. This instrument should never be employed without a previous digital examination, nor should it be used when there is the least room for suspecting pregnancy, as its introduction into the gravid uterus would be almost certain to cause abortion. The best sign for determining whether it will be proper to use the sound or not is the presence or absence of softness of the vaginal portion of the cervix and of the edges of the os uteri, its presence being a characteristic sign of pregnancy.

Few matters of professional interest have excited keener controversy, or elicited greater diversity of opinion, than the question of the desirability or even of the necessity, of the use of the speculum. Some practitioners allege that this instrument is unnecessary, and that a sufficient amount of information concerning the state of the os and cervix uteri may be obtained by a digital examination, without recourse to the speculum; others consider its employment as essential whenever a certain series of symptoms present themselves; and a few (very few, we hope) use the speculum, as Dr. Hewitt observes, much more indiscriminately. Those readers who may happen to turn to the chapter on the examination of the os uteri by means of the speculum with the expectation of finding an elaborate array of arguments, *pro* and *contra*, upon this instrument, regarded in a moral point of view, will be disappointed, as the author disposes of this point by simply remarking that "It is not intended in this place to discuss at any length a question which, involving, as it does, considerations of a moral as well as of a pathological nature, every practitioner must and will decide for himself." He lays down, however, some general rules for the employment or avoidance of the speculum as a means of diagnosis. It should never be used without a previous digital examination, which will show whether the state of the parts may be such as to render it unadvisable to use the instrument, as in cases of cancer advanced beyond the first stage, or when the hymen is present; or impossible, as when the vagina is occupied by

a polypus or by other tumours, narrowed by adhesions, &c. The use of the speculum is, as a rule, objectionable, Dr. Hewitt observes, in the case of young unmarried women, and more especially when the hymen is intact. To these general rules we would add that any resort to the speculum, without previous attempts to arrive at a diagnosis by other means is to be reprobated, and that an examination with this instrument should never be made, excepting in the presence of a third person. We give this latter piece of advice, not because we have any reasons for suspecting moral obliquity on the part of any of our medical brethren, but because we believe that a positive adherence to this simple rule would do much to prevent serious results to individual practitioners, and unpleasant consequences to the profession at large, by putting an end to the nefarious charges which are occasionally brought by designing females, and of which the past year has furnished at least one notable example.

The cases in which the speculum is most commonly required for purposes of diagnosis are:—Obstinate leucorrhœa in which an abnormal condition of the cervix uteri, or of the glands in that situation, is suspected; menorrhagia, or recurring hæmorrhage, which may be associated with the existence of polypoid growths within the os uteri, which are too small to be detected by digital examination; and cases in which it is deemed advisable to examine ocularly the condition of the portio vaginalis and os uteri, in order to obtain evidence as to the presence and nature of ulcerations, abrasions, &c. It is also employed when it is considered advisable to examine into the condition of the uterus itself, the cervix uteri having been previously dilated by the use of tents or other dilators.

When enlargement of the abdomen is present, some valuable diagnostic information may be derived from inspection, palpation, and percussion. Upon a cursory consideration it would appear as if one might readily determine, in this way, whether an abdominal tumour was actually present or not, however difficult it might be to come to a decision concerning its exact nature; but numerous authenticated cases show, that even the most experienced practitioners may sometimes be misled by certain fallacious appearances. Cases have been recorded in which events subsequent to the diagnosis have shown that no tumour could have existed, although earlier in the case positive opinions were formed as to the presence of a tumour. In one instance, quoted by Dr. Hewitt, a woman was operated upon at Berlin, in 1828, under the idea that she suffered from extra-uterine pregnancy; but, on cutting into the abdomen, no tumour and no enlargement of any organ could be detected. The cases which present most

difficulty in this respect are those of so-called phantom tumours in which an abdominal tumour is simulated in hysterical women, the abdominal muscles being so contracted as to convey to the hand the impression of a tumour. These phantom tumours may be detected by the gradual disappearance of the tumour if firm pressure be employed upon it, when the patient's attention is completely diverted by keeping her in conversation upon some indifferent topic; it may also be sometimes made to disappear upon change of position, but it is by placing the patient under the effects of chloroform as was first pointed out by Dr. Simpson, that the reality of the tumour can be most efficiently tested.

Dr. Hewitt enters at considerable length into the description and diagnosis of ovarian tumours, to which a peculiar interest is attached at the present time in consequence of the introduction and adoption of the operation of ovariectomy for the cure of this class of tumours. The best method to be pursued in the diagnosis of supposed ovarian tumour is elimination, *i. e.*, by satisfying ourselves of the absence, *seriatim*, of other causes of swelling and enlargement. In the first place, we should inquire into the possibility of pregnancy, especially as the uterine sound can be employed to aid in the diagnosis after it has been ascertained that the patient is not pregnant. Following the eliminative process further, we shall eventually be able to form a conclusion of the nature of the tumour; and if it should appear, after careful examination, to be connected with the ovary, the next step will be to ascertain the precise character of the tumour, and what plan of treatment it will be best to follow.

In the second division of his work, Dr. Hewitt gives a concise account of the treatment to be adopted in each of the disorders of which he has previously described the diagnosis. Wherever points are involved upon which diversity of opinion exists, he always expresses his own views, but, at the same time, he does not neglect to lay a fair epitome of what has been said on both sides of a disputed question.

“The relation subsisting between constitutional disorderment and diseases of the generative organs is,” as the author observes, “one of the utmost importance in reference to treatment, and it is unquestionably the fact that, in all cases, even where the local ailment requires special attention, a due regard to the general condition of the individual, and the application of therapeutic measures tending to restore the general health, are of the greatest service. We must endeavour in practice to avoid the two extremes, and to neglect

neither the condition of the general health nor the local affection." Acting upon these sound and rational views, Dr. Hewitt escapes the error, into which most specialists fall, of attaching undue importance to local manifestations of a general disordered state of the patient, arising in connection with blood-disease, errors in nutrition, and similar constitutional causes.

The theory that the lining membrane of the uterus is the part to which remedies may be most advantageously applied in the treatment of uterine inflammation, endometritis, is entertained by some continental obstetricians, and is supported in this country chiefly by Dr. Tilt and Dr. Routh. In some cases of chronic menorrhagia, a fungous condition of the lining membrane of the uterus has been observed, when the os and cervix uteri have been dilated, and the uterine cavity exposed; and this peculiar state is looked upon by the writers referred to as evidence of endometritis. The treatment which they recommend consists in the removal of the fungosities by means of a curette, an instrument shaped like a spoon, with a cutting edge; in addition, Dr. Routh also applies tincture of iodine or some other stimulating substance to the uterine lining membrane. Dr. Hewitt objects to this extreme plan of treatment, and states his belief that the cases of menorrhagia must be exceedingly few which are incapable of being satisfactorily treated by other and less dangerous measures.

He also advocates moderate views with respect to the treatment of chronic inflammation of the os and cervix uteri by caustics. Potassa cum calce, and sometimes even the still stronger preparation, caustic potash, are employed locally by Dr. Henry Bennet, Dr. Simpson, and others, in treating chronic inflammatory conditions of these parts. For the manner in which they are recommended to be applied, the reader is referred to Dr. Bennet's work on "Inflammation of the Uterus." Numerous and serious objections to this plan have been advanced by Dr. West, Dr. Tyler Smith, and other opponents of it, and Dr. Hewitt is also of opinion that it must often be productive of mischief even when used by experienced practitioners, while other and less dangerous methods of treatment can be advantageously substituted for it.

The differences of opinion to which reference has already been made exist to a very marked extent upon the question of ovariectomy. The deep shades of difference are, however, gradually softening down, after the subject has been productive of much fierce and acrimonious discussion; but opinions strongly adverse to this operation are still enter-

tained by a small band of medical men, headed by a veteran obstetrician, who, by his strong faith in hearsay evidence, when it is against the operation, and by his obstinate refusal to receive ocular proofs of its success, furnishes a striking proof of the truth of the Latin adage, "*Segnius irritant per aures demissa, quam quæ fidelibus oculis subjecta sunt.*"

It will be unnecessary for us to enter here into the numerous arguments which have been advanced in favour of or against the operation of ovariectomy, as they have been so recently and so perseveringly brought before the profession; and we need only state that the opinion, that the operation is both allowable and necessary in certain cases, is now very generally gaining ground. That it is, upon the whole, as safe as any other operation of similar magnitude, is shown by the tables of cases given in Dr. Hewitt's book; and it is highly probable, as shown by the diminished rate of mortality from it during the last two years, as compared with the statistics of previous years, that an improved knowledge of the indications for and against the performance of ovariectomy, of the manner in which it should be performed, and of the general treatment before, during, and after the operation, will be followed by a proportionate increase of successful cases.

Dr. Tilt's "*Handbook of Uterine Therapeutics,*" supplies a want which has often been felt, by bringing together, within moderate compass, the therapeutic agents which are most serviceable in the treatment of the diseases of women; so that the practitioner, with this little work in his hand, is enabled in a short space of time to determine what remedies will best suit the requirements of any individual case. It may, therefore, not only be read with pleasure and instruction, but will also be found very useful as a book of reference. In some places, as at page 248, for instance, when the author indulges in fanciful simile, we for a moment lose sight of the real nature of the book, but these exceptions are fortunately rare.

Dr. Tilt commences with the subject of dietetics, which play an important part in the treatment of every class of diseases, as the effect of the best remedies must be completely neutralized by errors in diet and general habits of living, while, on the contrary, a suitable regimen, with proper attention to rest, exercise, &c., will often suffice of themselves to bring about a cure. Rest is essentially requisite in many forms of uterine disease, and one of the greatest difficulties with which a medical man has to contend in the management of these cases, is the desire which the patient naturally exhibits to get about again, and to attend to the ordinary

duties of life, before she is sufficiently recovered to allow of her undergoing the extra exertion without incurring the danger of a relapse. In speaking of diet, Dr. Tilt comments upon the fact, that many invalids take a larger amount of animal food than they can digest, in consequence of their holding erroneous ideas upon the subject of a meat diet; and he also strongly objects to the indiscriminate use of wine, ale, and other stimulants in cases of uterine affection.

Respecting antiphlogistic treatment, Dr. Tilt thinks that bleeding is undeservedly neglected as a remedial agent in uterine affections, but we believe that no reasons which can be advanced are powerful enough ever to restore this mode of treatment into general use. The dysmenorrhœa to which plethoric women are often subject, may be avoided, according to Dr. Tilt, by venesection; and he adds, that blood-letting is sometimes beneficial in cases of chronic uterine and ovarian affections. By blood-letting, it must be understood, however, that Dr. Tilt refers only to small bleedings, to the extent of from two to four ounces, the removal of which is not likely to produce the nervous reaction determined by large bleedings in patients below the average strength of constitution; this moderate venesection will, he says, weaken the patient less than the endurance of the pain, which it averts, would do. Local blood-letting, by means of leeches, is also recommended in affections of the uterus and ovaries, when these are accompanied by undue vascularity.

As it is very desirable to avoid the risk of causing intestinal irritation, when purgatives are required for patients suffering from chronic uterine disease, those aperients should alone be used which are of mild action. If relief be not obtained by the administration of castor oil, sulphur, of which Dr. Tilt speaks very highly, may be given; his plan is, either to give the flour of sulphur alone, or to combine with each ounce of this drug a drachm of the sesquicarbonate or bicarbonate of soda, and occasionally from twenty to forty grains of powdered ipecacuanha, one or two scruples of this powder to be taken, at night, in a little milk.

The close sympathy between the nervous system and the uterus gives rise to so many general complications, of which hysteria may be taken as an example, in cases of uterine disorder, that sedatives, either given internally or applied near the seat of pain, are often required for the purpose of relieving the pain, or of subduing the excited condition of the patient. Dr. Tilt does not believe that there is any remedy belonging to this class which possesses a specific influence upon the uterus, although some writers have attributed wonderful effects to various medicinal agents, amongst which the extract

of conium stands foremost; this he admits to be an useful drug, but he does not consider that it is more valuable than hyoscyamus, or belladonna, which is much praised by Trousseau, in the treatment of diseases in which the uterus is implicated. Peculiar sedative, and, in fact, anæsthetic effects upon the generative organs have recently been attributed to the bromides of potassium and of ammonium, but Dr. Tilt does not name either of these useful salts. In prescribing sedative medicines, it is very advisable that the practitioner should carefully study the constitution of his patient, as many of the substances included in this class are liable to produce very contrary effects upon different individuals. Opium furnishes many notable examples of the uncertainty of the action of sedatives. An ordinary dose of one of the preparations of this drug, which will usually give several hours of calm sleep, and complete cessation of pain to one person, may suffice to bring on heavy stupor in another individual, or to produce violent headache, vertigo, and temporary delirium in a third, so that few remedies require to be more cautiously tried, or to have their effects more closely watched.

The other sedatives described by Dr. Tilt are camphor, hyoscyamus, belladonna, aconite, used externally, veratria, also employed externally, chloroform, either inhaled, administered in a draught, or applied locally in the form of lotion, &c.; cannabis Indica (Indian hemp), a very useful sedative in one-quarter grain doses, given in combination with extract of hyoscyamus, hydrocyanic acid, camphor, a powerful anaphrodisiac, lupulin, also anaphrodisiac in drachm doses of the tincture, and castor, an almost obsolete drug, to which Dr. Tilt appears to attach some value.

The longest chapter in the "Handbook of Uterine Therapeutics" is devoted to the subject of the use of caustics in affections of the os and cervix uteri, which Dr. Tilt uses freely in his practice. The caustics which he prefers, when the indications for their use are present, are nitrate of silver in solution or in the solid form, and potassa cum calce; he attributes much importance to the latter as a local remedial agent, but he denounces, in strong terms, the employment of the more powerful agent, caustic potash, introduced into practice by Dr. Simpson.

The mode of treatment which should be adopted for the purpose of arresting hæmorrhage will depend, of course, upon the cause which has given rise to it. Blood-letting, to the extent of eight or ten ounces, is fully justified, according to Dr. Tilt, when the continuance of flooding does not alter the hard jerking character of the pulse, which indicates the hæmorrhagic diathesis. Under the head of hæmostatic reme-

dies, he states that ice, given internally, or applied to the external generative organs, and injections of iced-water into the vagina and rectum, will be most valuable agents in procuring the contraction of the open mouths of the uterine blood-vessels in menorrhagia, &c. He describes the following valuable agents for arresting hæmorrhage:—the mineral acids; mineral astringents, of which alum, sulphate of zinc, and perchloride of iron are the principal; vegetable astringents, all of which owe their virtue to the tannic and gallic acids which they contain; opium, in full doses; digitalis; ergot of rye, which we should prefer to all of the medicines in this class; turpentine; revulsives, such as mustard applied to the arms and legs, and dry cupping. Amongst the surgical measures which are described, are the scraping away of the fungoid growths present in endo-metritis (a plan strongly opposed by Dr. Hewitt, as we have stated in our notice of his work); plugging of the vagina, or of the os uteri. Careful tonic and alterative treatment will, of course, be necessary for a considerable period after the occurrence of profuse uterine hæmorrhage.

Dr. Tilt considers that the use of the uterine sound, and of intra-uterine pessaries, in the treatment of alterations in the position of the womb, is always useless, and sometimes very dangerous. He attaches much pathological importance to the relaxed state of the vaginal walls, in relation to the mechanism of retroversion and anteversion of the uterus, and consequently recommends in the treatment of these affections such measures as are calculated to correct the vaginal relaxation, such as the injection of cold water into the rectum or vagina, or of astringent solutions, those of alum, sulphate of zinc, and tannin, being the best, into the vagina.

Rest, and support to the uterus by pressure, with bandages over the abdomen, are also useful auxiliaries to other plans of treatment. Dr. Tilt considers that the globular form is the best for pessaries, as it is the one most easily borne by the pelvic viscera, and by which the pressure necessary for steadying the uterus can be best exerted. The globular air-pessary, which is a bag of india-rubber introduced when empty into the vagina, and then filled with air, is very useful in giving support to the uterus when prolapsus has taken place. It should, however, always be kept in mind when pessaries are resorted to, that the necessity for their use has arisen from the inability to produce contraction of the excessively dilated vagina, so that we consent to fill up the distended part of the vagina with the pessary, in order that the position of the womb may be fixed, and the patient's sufferings be relieved. We should therefore consider all

appliances of this kind as palliative measures only, and still endeavour to procure contraction of the dilated vaginal canal by astringent injections, &c. Various surgical plans of treatment for prolapsus uteri have been suggested by different writers; the chief of these are cauterisation of the vagina, so as to cause the formation of cicatrices, and in this way to narrow the vaginal canal, and increase the resisting power of its walls; excision of a portion of the vagina; and sutures, in order to produce sloughing, and subsequent cicatrization.

The concluding chapters of Dr. Tilt's handbook are upon the subjects of uterine complications, including affections of the bladder, &c.; sterility; the prevention of uterine inflammation by the observance of general hygienic principles; and the influence of hot climates upon uterine affections, this influence being especially shown by the production of dysmenorrhœa, a predisposition to flooding after labour, and other uterine disorders.

A formulary is appended, in which are contained some useful prescriptions, both for internal and external use. Glycerine enters largely into the latter class of compounds, and the preparations in which it serves the purpose of a vehicle will be found preferable to the ointments generally employed, as its demulcent, detergent, and absorbefacient properties render it very superior to lard and the other excipients which are commonly used.

Dr. Chapman's little work opens out a wide field of therapeutical inquiry, and the subject upon which he writes is one which deserves attention. If his sanguine views become realised, it is evident that a considerable simplification of the treatment of functional disorders of women, as well as of certain important morbid conditions dependent upon the nervous system, must follow, since he undertakes to treat them simply by the application of heat or cold to various parts of the spinal column.

Starting with the facts, opposed to the ideas hitherto generally entertained, that by the application of cold to the region of the spine the circulation can be raised, and that by the application of heat to the same situation the heart's action can be proportionately lowered, Dr. Chapman advances that we have consequently under our control an important means of modifying the circulation through the effects of cold and heat respectively upon the nervous system and the circulation. Not only does he believe that the menstrual functions can be properly regulated by these two agents, but he also asserts that paralysis, epilepsy, infantile convulsions, laryngismus stridulus, diabetes, and some other disorders, may be cured by them.

At page 42, Dr. Chapman writes, in a somewhat defiant tone, of "sceptical critics, void of experience in this matter,"—that of the effect of cold and heat on the nervous system,—and further on he remarks, that when he has published certain evidence which he possesses, such scepticism will be finally silenced. This is scarcely the way in which to invite friendly discussion respecting the plan of treatment which he desires to establish. Every discovery, however valuable it may be, requires to be sifted and tested by general opinion and experience, before the full benefit obtainable from it can be arrived at; and the remarks into which Dr. Chapman's enthusiasm has led him are not only incautious but calculated to retard the object which we presume that he has in view in publishing the present work, viz.:—to make his ideas widely known, and to induce others to join him in attempts to solve the great problem to which he has probably discovered the key.

We fear that in some cases of which details are given, he has allowed his zeal to exceed his discrimination, as he seems to claim all the credit of the improved condition of his patients in favour of the special treatment, apparently omitting from his calculation the fact that they were subjected for a considerable period, in many instances, to careful medical treatment, and obliged to follow regular habits of diet, exercise, &c. Few persons will doubt the curative powers of the remedies used in several cases by Dr. Chapman, concurrently with what we may term the special treatment; amongst these we find the bromide and iodide of potassium, bromide of ammonium, colocynth, hyoscyamus, quinine, the citrate of iron and quinine, calumba, dilute sulphuric acid, and various salts of potash and ammonia.

As is explained by the author, the characteristic and novel feature of his treatment of defective and painful menstruation, consists in the application of ice or iced-water, inclosed in india-rubber bags, to that part of the back which corresponds to the three or four lower dorsal and all of the lumbar vertebræ, for about the breadth of two inches on each side of a line passing along the vertebral column.

The results of this application are stated to be:—a sedative influence on the ganglia of the sympathetic nervous system lying on each side of the spinal column; a diminution of the nervous currents in the vaso-motor nerves emerging from the ganglia acted upon, and distributed to the muscular fibres of the arteries of the reproductive organs; a diminution of the contractile energy of these muscular bands, so that the dilatation of the arteries which they surround is facilitated; and, by thus inducing in these arteries a state of ready

dilatability, the production of the circulation of the blood through them in greater volume and with greater rapidity than before. The application of hot water appears to cause exactly opposite effects to these.

The *modus operandi* of the ice applied to the back in increasing the menstrual flow is rendered intelligible by the foregoing statements; but how the uterine pain is removed is not so easily explained; nor is Dr. Chapman able to give any suggestion excepting that after the unhealthy condition of the parts has been removed, the pain ceases.

This and some other points connected with Dr. Chapman's plan of treatment require to be further worked out, and we shall gladly welcome additional information upon them from such a pains-taking and able observer as he has shown himself to be.

Military Surgery. By GEORGE WILLIAMSON, M.D., Surgeon-Major 64th Regiment. Pp. 255, 8vo. London: Churchill and Sons, 1863.

THIS book is not what we might at first anticipate, from its plain title, simply a manual for students and young military practitioners, compiled from the experience and dicta of the most noted army surgeons, but a practical digest, carefully wrought out, of all the information the author has derived, both from his own military practice, and from a careful examination of the specimens contained in the splendid pathological museum attached to Netley Hospital. The foundation for this treatise was the author's "Notes of the Wounded from the Mutiny in India," published in 1859, but in the later work he gives us the benefit of his more extended experience. This must be very valuable, as we find that to him has been entrusted the care of large numbers of wounded soldiers who were sent to this country, in consequence of the Indian mutiny, as also the arrangement and description of the very valuable collection just referred to, enriched, as it has been, by numerous specimens, afforded by the Crimean and Indian wars. The advanced state of surgical science seems to be shown in the success attending the adoption of conservative surgery of late years, as instanced particularly in the number of useful limbs preserved after severe comminuted fractures of the femur and injured hip-joints, and our author indicates further advances in the direction of conservative treatment. In his Introduction he makes some sensible remarks upon the great advantages to be

derived by the advanced student and young military surgeon from the course of instruction at the Netley Hospital, by which he may gain an insight into the duties and habits of the British soldier, and may observe the results of tropical and colonial disease and injury, as shown in the wards and museum, to a degree unattainable by any other class of practitioner, British or foreign. The body of the work chiefly consists of remarks on the principal points of military surgery as illustrated by the record of cases treated in the Chatham and Netley Hospitals, and by the preparations in the museum. The author uses the improved classification of gun-shot injuries, suggested by Inspector-General Taylor, C.B. He discusses *seriatim*, the wounds of the head, chest, abdomen, and extremities, giving the principal points of the illustrative cases. These are still further elucidated by the admirable series of plates by which the morbid conditions induced by the injuries described are brought before the eye.

Dr. Williamson passes in review the principal controverted points in military surgery, which probably may require an indefinite time for their final settlement, if we are happily spared such unnecessary and ruinous wars as have distinguished former times. For the present, we must be content to learn, from our own experience in the wars of India and the East, and from the present experience of others in the great American conflict. It is impossible for us to follow our author through all his interesting details and researches. Suffice it to say, that he has most perseveringly endeavoured to extract from the sources indicated, as well as from a conscientious study of the literature of the subject, British and foreign, all the information applicable to correct views of pathology and practice, on almost every point of military surgery, not including hygiene. We think that his observations on the use of the tourniquet, in steadying an injured limb, are especially useful, as well as those on trephining; he inclines to the opinion that possibly the use of this operation may be altogether discarded in military practice. His remark, by the way, on the frequency of erysipelas after scalp wounds, in which sutures, plaster, &c., have not been applied, in reply to the objections generally entertained to the use of those means, seems to us to be quite inconclusive. The reader will derive useful information from a perusal of his observations on hernia cerebri, and its treatment by pressure; on the necessity for active depletion, &c., in inflammation of the brain; on the cause of the frequently-found ununited fracture of the lower jaw; on hernia of the lung; on the probable disorganizing effect of depletion in the form of pneumonia, which is sometimes met with after gunshot wounds of the lung,

when the inflammatory action may probably be a salutary effort of nature; on the possibility of the healing of wounds of the diaphragm; on the causes of the infrequency of fæcal evacuations from a wounded intestine; and on the methods nature employs for preventing fatal effects in these wounds.

With regard to compound comminuted fractures of the femur, Dr. Williamson accounts for the greater success in the Indian cases, as being due partly to the dooly-transport system, and advocates the avoidance of the plan of keeping the injured limbs on the stretch, with a view to prevent shortening. He observes that, in India, the wounds of the larger joints have done better also, than those formerly treated. He also makes some valuable observations on the causes of non-injury to the principal vascular and nervous trunks; on the difference of success as regards primary and secondary amputations, the former being the most successful, the latter least so, in military, while exactly the reverse holds good in civil, practice. It would seem that, in the present day, the want of aids to recovery, such as are to be met with at home, including rest, privacy, freedom from anxiety, and the attentions of friends, may interfere with the success of secondary operations in military practice. Further experience, however, may enable us to supply these desiderata in great measure; if so, we may also gain time to choose at leisure the best kind of operation, performing resection more often, in place of amputation; this will form an additional step in the progress of conservative surgery. We are sorry to find the record of success in the matter of hip-joint amputations so unfavourable, although, still, our author thinks it established by evidence, that one out of three patients thus treated survives. Excision of this joint he states to have been much more successful, although it would appear that, out of eleven cases of this operation, after gunshot injury, only one recovered. He doubts whether, at present, we are justified, in any case, in performing excision of the knee-joint, when the army is in the field.

In chapter 20, Dr. Williamson furnishes some valuable statistics of the proportion of deaths after certain wounds, of the different organs of the body, &c., which, unfortunately, the limited space at our disposal will not allow us to analyse.

The twenty-first and concluding chapter contains some valuable suggestions regarding the improvement of conveyance for troops in the field, in which he recommends the establishment, for European and other battle-fields, of a regular supply of dooly-bearers; the doolies to be kept in store, and the bearers to be obtained from India, as occasion might require, at rates of pay and pension sufficiently high to

ensure the steadiness and fidelity of the men in the campaign. We have reason, ourselves, to speak most highly of the Indian dooly system, and in this opinion we are sustained by such authorities as Ballingall, Renny, Muir, and others. On one point we are at issue with the author. He gives a very decided opinion, that no sanitarium, like that which was in process of establishment at the Cape, would be of any benefit to the soldier disabled from disease or injury in our tropical colonies; and he adds, that the soldier does not wish to go anywhere but "home." We think, however, that upon a further investigation of the subject, it will be found that, if the invalid has become organically, or in any way severely, diseased, the disadvantage of coming "home" to a cold and wet climate will not be counterbalanced by the anticipated home-comforts. On this account we cannot but regret that the authorities have not carried out their intentions, of establishing a sanitarium in some part of our southern colonies. If the Cape be objected to, Australia could furnish a really admirable climate, in which the tropical invalid might, at any rate, pass some intermediate time, before returning to duty, or being finally invalided. In conclusion we may state, that the author's style is clear, and that the book contains so much new and valuable matter that it cannot fail to afford instruction to all, whether they are already experienced, or as yet only tyros, in military surgery.

THE PARIS SOCIETY OF SURGERY.—This body, at the first meeting for this year, elected Dr. Robert Adams, of Dublin, and Messrs. Hodgson and Paget, of London, as foreign associates; and MM. Melchiori, Gamgee, Bruns, and Gherini, have been elected as foreign correspondents.

INVALID BATH.—A very useful bath, which has already been highly spoken of by some of the medical journals, has lately been invented by Mr. Maddox, Surgical Instrument-maker to University College Hospital. It is made in such a shape that it can readily be passed under a person either lying in bed or sitting up; besides which, it possesses the great advantage that the water cannot be spilt. The part which is likely to be brought into contact with the patient is well padded, and the material of which the bath is constructed is a complete guarantee against the occurrence of the serious accidents which sometimes happen from the use of baths made with china or other fragile materials. It is especially suitable for use after surgical operations, for females after confinement, and, in fact, whenever it is necessary to apply fomentations to the lower part of the body without disturbing the patient. The additional recommendations of portability and cheapness render it superior to all appliances hitherto devised for similar uses.

MONTHLY RETROSPECT OF BRITISH AND
FOREIGN MEDICAL JOURNALS.

PRACTICAL MEDICINE AND SURGERY.

Epileptiform Paroxysms produced by the Presence of Worms in the Alimentary Canal.—Most writers now admit that epilepsy, caused by the existence of worms in the intestines, is not uncommon. In children intestinal worms, especially lumbrici, often give rise to numerous morbid phenomena connected with the nervous system, strongly resembling epilepsy, chorea, and other spasmodic disorders. In these cases, the epileptiform convulsions vary greatly; they may be more or less violent, partial or general, and may even be so severe as to cause the death of the patient. M. Guersant has recorded the case of a child who died in convulsions, and in whom, upon a post-mortem examination, two lumbrici were found in the hepatic duct, into which they had penetrated, and in which they were still entangled. The termination by death is, however, rare as the worms are usually expelled, either spontaneously, or by the action of medicine. Stahl gives the case of a child, six years old, in whom very strong convulsive paroxysms, generally preceded by violent pain in the belly, came on every evening about six o'clock. The expulsion of a large number of lumbrici completely put an end to the epileptiform convulsions. Bartholin, Heister, Pechlin, and Tissot, as also some more modern writers, have recorded analogous cases. Wepfer mentions several cases of this kind produced by tænia. One was that of a little girl, of three years of age, who had been epileptic for several months, and had suffered from almost constant pain. She passed a tape-worm, three or four yards long, and a cure speedily followed. In another instance, that of a little girl who had become cataleptic at seven years of age, the symptoms assumed the form of epilepsy when she reached her tenth year. The fits recurred so frequently that the poor child became reduced to a state of idiocy, and was even unable to recognise her mother. A tape-worm was expelled, and the fits ceased, while the intellectual faculties were gradually restored. Dr. Gaube has reported in the "*Revue Médicale*," the case of a man who had suffered from epilepsy for seventeen years, and who was cured after he had passed a tape-worm from the bowels. One of the most recently recorded cases of this nature is contained in the "*Imparziale*," an Italian medical journal. A woman, thirty-two years of age, after suffering some time from pains in the abdomen, irritation of the nose

and at the anus, and other signs of intestinal entozoa, was attacked by frequent paroxysms of convulsion of the upper and lower extremities, with foaming at the mouth, and other characteristic symptoms of epilepsy; these fits lasted about five or ten minutes. There was also very severe and constant headache. As she had passed some fragments of tape-worm, and there was evident reason for suspecting its continuance, Dr. Orta prescribed a full dose of croton oil, administered in the form of a pill. Numerous pieces of the tape-worm were discharged with the evacuations, and upon the repetition of the oil four days subsequently, a worm four yards long was passed whole. Since that time the woman has suffered from no return of the epileptiform convulsions or other ailments.—*Journal de Médecine Mentale*.

The Treatment of Dropsy.—Dr. George Johnson observes that there are two objects to be aimed at in the treatment of dropsy: 1st, to remove the dropsical effusion; and, 2nd, to remove the original cause of the dropsy. If we can accomplish the second of these objects, the first is generally attained at the same time. The dropsy will soon disappear with the removal of cause. For instance, the slight anasarca which occurs in chlorotic young women is a result of a poor and watery condition of the blood. The dropsy quickly passes away when the quality of the blood is improved by nutritious food, fresh air, and exercise, with the use of iron as a tonic, and perhaps an occasional aperient. In cases of acute renal dropsy the urine is at first scanty and of morbid quality, being often high-coloured from admixture with blood, always albuminous, and usually containing numerous casts of the kidney tubes. The scanty secretion of urine is the cause of the dropsy, and the secretion of urine is scanty because the flow of blood through the kidney is obstructed and the structure of the gland changed, the tubes being filled with desquamated epithelium and with blood and fibrin, which have escaped from the gorged Malpighian vessels. If this patient is placed in circumstances favourable to his recovery, and is treated by confinement to bed, low diet, dry cupping, or the application of mustard and linseed poultices to the loins, and the excitation of free action of the skin and bowels, so that the work of the kidneys is diminished, we shall find that the secretion of urine begins to increase, until, in the course of four or five days, perhaps, the quantity of urine, which at first had been less than half the natural amount, becomes three times as great as the standard quantity, no diuretic medicine of any kind having been given. The explanation of this spontaneous diuresis appears to be this:—During the acute stage of the renal disease, the constituents of the urine, both solids

and liquids, have accumulated in the blood, and have thence been effused into the areolar tissue and into the serous cavities. Now urea itself is a most powerful diuretic; and no sooner is the inflammatory congestion of the kidney removed, and the freedom of the renal circulation restored, than the urea exerts its natural diuretic action on the kidney. The copious diuresis thus induced speedily removes the accumulated urinary solids and liquids from the blood, the areolar tissue, and the serous cavities into which they had been effused, and so the dropsy is cured. Stimulating diuretics, such as squills, or cantharides, or turpentine, are injurious by increasing congestion of the kidney. The best diuretics in such cases are means which tend to lessen the congestion of the kidneys; counter-irritation over the loins, especially by dry-cupping; hot-air baths and diaphoretics, purgatives, and a scanty diet.

In some cases of chronic renal dropsy, diuretics may be given without risk, but too often without much benefit in the way of removing or lessening the dropsy. Diuretics are more frequently successful in cases of cardiac dropsy, when the kidneys are free from disease. Dropsical accumulation tends to cause a secondary impediment to the circulation by the pressure of the effused liquid from without upon the small blood-vessels. And, again, the capillary circulation becomes more and more impeded in proportion to the increasing distension of the blood-vessels which results from cardiac or renal disease. The drain of liquid from the areolar tissue, allowing of a further exudation from the blood-vessels, thus removes or lessens the obstruction which results from engorgement of the vessels. The general circulation therefore becomes more free, and the greater freedom of the circulation through the kidney is attended, as we have before seen, by a more copious secretion of urine.

The free action of a hydragogue—elaterium for instance—is often followed by a copious secretion of urine. The gorged vessels are partly unloaded by the drain of liquid from the bowels; the circulation through the kidneys, as through other parts and organs, consequently becomes more free; and hence a copious secretion of urine, and a rapid diminution, or even a complete removal of the dropsy.—*Lancet*.

The Treatment of Chronic Ulcers by the Internal Use of Opium.—In a clinical lecture delivered at St. Bartholomew's Hospital, and reported in the "*Lancet*" of January 2nd, Mr. Skey states that he has treated a large number of these affections by the administration of opium, and with uniform success. The more chronic the ulcer, the larger its size; the

more aged the subject, the more remarkable is the influence of opium in effecting its cure. Let a case be selected for experiment of some twenty years' duration, which has exhausted the patience of various medical attendants, as well as the remedies employed by them for its cure. If we treat such a case of chronic ulcer of the largest size, having a pale flat bloodless base, a high mound of lymph around it covered by unhealthy integument, the sore pouring out a large quantity of watery ichor, saturating the linen, stockings, and other appliances, by giving ten or fifteen drops of tincture of opium night and morning, leaving the bowels alone, and observe the base of the sore in five or six days, we shall find that it will exhibit a number of minute red points which, daily increasing in number, will rise up in the form and identity of healthy granulations, and cover the entire surface of the ulcer. Contemporaneously with the gradual elevation of the base of the ulcer is the descent of the surrounding eminence and the commencement of the process of cicatrization. Mr. Skey says that, if he desired to select an ulcer, on behalf of a student, with a view to illustrate the character of perfect granulations as they appear in a thoroughly healthy example, he would select an ulcer which had been treated by opium in preference to any other. Mr. Skey considers that the salutary action of the opium on the ulcer is obtained solely through the healthy influence it exercises on the constitution, and that no drug is more innocuous than opium is, when it is judiciously employed.

THERAPEUTICS AND MATERIA MEDICA.

Collodion in Combination with Perchloride of Iron.—The perchloride of iron combined with collodion is a good hæmostatic in cases of cuts, leech-bites, &c. The proportion in which they should be mixed is one part of the crystallised perchloride of iron to six parts of collodion. Some care is requisite in dissolving the iron-salt, as the heat which is developed during the process will produce ebullition of the collodion, if it be pushed too far. The compound which is formed is a limpid fluid, having a yellowish-red colour; when applied to the injured surface of the skin it gives rise to the formation of a little pellicle which retains considerable elasticity for some time.—*Bulletin de Thérapeutique.*

The Diuretic Properties of the Seeds of the Clematis.—We have largely employed during several years past the seeds of the wild Clematis (*Clematis vitalba*, a plant which is indigenous to England, known by the common name of "Traveller's Joy,") as a diuretic, and in a great proportion of cases we have obtained very satisfactory results. These seeds, which

are scarcely used in Belgium, are well-known and much appreciated in Holland, where many practitioners prescribe it in the treatment of dropsy, and speak highly of its value. Our first trial of this remedy was in 1858, in the following case of anasarca consequent upon Bright's disease of the kidneys:—

P——, 38 years of age, a carriage-builder's workman, was admitted into the Bavière Hospital, under M. Sauveur, having every symptom of chronic albuminuria, viz., a large quantity of albumen in the urine, general anasarca, dimness of vision, and incipient hypertrophy of the left ventricle, without valvular lesion, which condition, as has been shown by M. Traube, is always a result of morbid alterations of the kidneys. Digitalis was first administered, and afterwards purgatives, which diminished the effusion to a slight extent, but they produced an attack of diarrhoea which weakened the patient so much that it was requisite to discontinue them. At this stage Professor Sauveur ordered the infusion of clematis seeds to be taken. The effects of this remedy was very remarkable; copious diuresis was established, the quantity of albumen became less every day, and the dropsy was soon entirely removed.

We had recourse to the same treatment shortly after this, with equal success, in a case of albuminuria occurring in a man who was also the subject of inveterate syphilis, and in whom the Bright's disease of the kidneys, apparently following upon amyloid degeneration of those organs, had reached its last stage; the effusion was very considerable, and all treatment which had been adopted had proved unavailing. The infusion of clematis seeds, which was given by itself, removed the anasarca after a few days' time. In the case of this man the medicine increased the quantity of urine to a singular extent; but was reduced to its normal quantity within one day after the patient had discontinued taking it. When he left the hospital, the albumen, which had been very excessive for some time, was greatly diminished in amount. It is unnecessary to multiply examples, and we shall therefore only add, that since we had under treatment these two cases which have been detailed, we have prescribed this remedy in all forms of dropsy, whether dependent upon renal disorder or affections of the abdominal viscera, and that we have almost always found it to be successful.—*Ann. de la Société Médico-Chirurgicale de Liège.*

THE MONTH.

MEDICAL INTELLIGENCE.

ROYAL COLLEGE OF PHYSICIANS.—The lectures of the present year will be delivered at the College, Pall Mall East, at five o'clock on each of the following Wednesdays and Fridays:—Dr. Garrod—January 27, 29, February 3, 5, 10—“The British Pharmacopœia: its Construction, its Comparison with the London Pharmacopœia, and the Value of its New Remedies in the Treatment of Disease.” *Gulstonian Lectures*.—Dr. Markham—February 12, 17, 19—“The Uses of Blood-letting in Disease.” *Croonian Lectures*.—Dr. Basham—February 24, 26, March 2—“On Dropsy: its Significance as a Symptom in Renal, Cardiac, and Hepatic Diseases.” *Lumleian Lectures*.—Dr. Barclay—March 4, 9, 11—“Fallacies in the Application of the Inductive Method of Reasoning to the Science of Medicine.”

THE WEIGHTS AND MEASURES RECOMMENDED IN THE NEW PHARMACOPŒIA.—The Council, in resolving to adopt for pharmacy the imperial ounce and pound, could not assimilate the sub-division of the ounce to that of the fluid-ounce, without substituting a new medical grain for the troy grain, hitherto the medical as well as the standard grain of the kingdom. This alteration they did not consider advisable; it has, therefore, appeared to them a necessary consequence, that the drachm and the scruple, the old denominations of weight between the ounce and grain of pharmacy must be abandoned, since they can no longer exist as both simple multiples of the latter and integral parts of the former. Accordingly, all who prescribe and dispense medicines, are recommended, according to the New Pharmacopœia, from which this extract is taken, to discontinue, henceforth, the use of the drachm and scruple weights. The weights and measures of the *British Pharmacopœia*, with their symbols, will now stand as follows:

WEIGHTS.

1 pound..... lb.....	=	16 ounces	=	7,000 grains.
1 ounce..... oz. ..	=	..	=	437·5 grains.
1 grain..... gr. ..	=	..	=	1 grain.

MEASURES.

1 gallon..... C.....	=	8 pints..... O. viij.
1 pint..... O.....	=	20 fluid-ounces .. fl. oz. xx.
1 fluid-ounce.... fl. oz.	=	8 fluid-drachms .. fl. dr. viij.
1 fluid-drachm .. fl. dr.	=	60 minims..... min. lx.
1 minim..... min.	=	1 minim..... min. j.

THE RESPITE OF TOWNLEY.—It has been publicly stated that Sir George Grey, in sending a commission to inquire into Townley's state of mind, acted under the 3rd and 4th Vic., chapter 54, which provides that *any* prisoner, even if under sentence of death, may, if shown to be insane by the certificate of the magistrates and two medical men, be removed to a lunatic asylum. Sir George Grey, therefore, had no choice in the matter. The real grievance is, that a similar commission is not issued in every case, whether the person be rich or poor. The Derbyshire county magistrates have memorialised the Home Secretary on the subject of Townley's respite, which they consider to be an infraction of justice. This matter is one which undoubtedly requires to be examined into further than it has yet been. The murder committed by Townley was attended by circumstances which render it almost an impossibility to consider that he was insane at the time, whatever might have been the state of his mind subsequently. Much misrepresentation has been made respecting the subject, by journals which are opposed to the system of capital punishment.

ST. BARTHOLOMEW'S HOSPITAL.—On January 12th the House Committee of Governors of St. Bartholomew's Hospital assembled to receive applications from candidates desirous of filling the posts of Physician and of Surgeon to the Hospital, rendered vacant by the resignations of Dr. G. Burrows and Mr. Skey. The two gentlemen who offered themselves were Dr. Senhouse Kirkes and Mr. Holmes Coote, respectively the Senior Assistant-Physician and the Senior Assistant-Surgeon. They were duly approved by the Court, and have since been elected by the General Court of Governors, which met on January 27th. The appointments of Physician and Surgeon having been made, vacancies arise for an Assistant-Physician and Assistant-Surgeon. Dr. Burrows has been elected Honorary Consulting Physician to the Hospital.

ROYAL COLLEGE OF SURGEONS.—The annual course of lectures will be commenced in the theatre of this institution, on Tuesday, February 2nd, by Professor Huxley, who will deliver twenty-four lectures on the Structure and Classification of the Mammalia. At the conclusion of this course, Professor Fergusson will deliver his lectures on Human Anatomy and Surgery. The lectures, as usual, will be delivered on Tuesdays, Thursdays, and Saturdays, at four o'clock. It is stated that, at the recent examinations on Anatomy and Physiology, no fewer than ten out of thirty-nine candidates were rejected the first day, and seven out of thirty-four the second day.

THE MEDICAL COUNCIL.—Dr. Alderson, the Treasurer of the Royal College of Physicians, will succeed Dr. Burrows as

representative of the College in the Medical Council, having been elected to that post at a General Meeting of the Fellows held on Tuesday, January 26th.

GERMAN LADY-SURGEONS.—Frau Josepha Fey has just received a licence to practise “Lesser Surgery” in the Cologne district, on the condition that she should always act under the direction of a received practitioner. This is the first example of such a concession being made to a woman in Germany.

PURIFICATION OF THE THAMES.—Dr. Acland, Regius Professor of Medicine in the University of Oxford, has addressed some valuable observations to the Registrar-General in reference to typhus fever in the colleges and the city of Oxford. The city lies low and is imperfectly drained. He advises that the drainage of the whole of the Thames Valley above Teddington should be in the hands of a Government Commission. He insists that the elements of disease are conveyed in water, though the distance may not be accurately known, and that there are many evils resulting from impure water which cannot be expressed in the death rate, such as feeble powers, tardy convalescence, and incalculable distress and discomfort.

OBSTETRICAL SOCIETY OF EDINBURGH.—Dr. T. G. Weir has been elected President, and Dr. T. H. Pattison and Mr. W. S. Carmichael, have been elected Vice-Presidents of this Society.

PASS-LISTS.

ROYAL COLLEGE OF SURGEONS, LONDON.

The following gentlemen passed the primary examination on the 19th instant:—

Messrs. G. H. Hills, T. E. D. Hayes, W. T. G. Hicks, R. J. Andrews, J. E. Roberts, C. E. Blair, of Guy's Hospital; P. F. Kilroy, A. E. Conolly, R. F. Allen, E. P. Davies, Dublin School; J. H. Wraith, E. Child, D. M. Williams, E. Horne, Charing Cross Hospital; G. Shannon, J. G. Coulter, M.D., Queen's University, Aberdeen; H. C. Manley, Belfast; H. B. Stirling, W. Powles, London Hospital; R. Brennan, H. G. B. Harris, St. George's Hospital; J. C. Leach, E. R. Woodford, University College Hospital; J. Hope, Newcastle School of Medicine; J. B. Blanchet, M.D., Montreal; T. H. Morris, St. Thomas's Hospital; J. C. Macaulay, Birmingham; W. A. S. Dykes, Hull; F. Argles, King's College, London.

On the 20th instant, the following gentlemen passed the primary examination:—

Messrs. W. H. Harding, H. Hyde, F. Flinte, and C. G. Leacock, King's College; F. Warren, J. F. H. Richardson, W. May, and W. H. Bryant, St. Bartholomew's Hospital; W. R. Goodfellow, B. Blewitt, J. Todd, J. Rogerson, London Hospital; F. Chabot, A. Kisch, W. H. Strange, and

J. Carless, St. Thomas's Hospital; T. Cuppage, W. L. White, R. N. Macpherson, of Edinburgh; C. Broom, R. Orme, Guy's Hospital; E. O'Leary, W. M'Connell, of Dublin; W. Pogson, Leeds; W. Skinner, Sheffield; H. Jones, M.D., Heidelberg; T. Horn, St. Mary's Hospital; R. Z. Miller, Middlesex Hospital.

APOTHECARIES' HALL, LONDON.

On the 31st of December, 1863, the following gentleman passed his first examination for the Licence:—

Richard R. Daglish, Guy's Hospital.

The following gentlemen passed the examination for the Licence, and received Certificates to practice, on the 7th January:—

George Elkington, junr., Birmingham; Joseph Morris, Birmingham; Joseph Smith, Lozells, Birmingham; Henry M. Parkes, Guy's Hospital.

On the 14th instant, the following Licentiates were admitted:—

J. B. B. Ryley, Myshal, co. Carlow, Ireland; F. Joseph Keene, Holbrook, Ipswich.

The Licence was granted, after due examination, to the following gentlemen, on the 21st instant:—

Messrs. Warner Atkinson, Harrington Square, and Frederick M'Nair, Guy's Hospital.

MEDICAL VACANCIES.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.—For an Assistant-Physician. Candidates must be Fellows or Members of the College of Physicians, London. Applications to be sent in on or before February 2nd.

LOUGHBOROUGH DISPENSARY, LEICESTERSHIRE.—For a House-Surgeon. Salary, £100, with furnished apartments, coal, gas, and attendance. An assistant employed to compound and dispense medicines. Applications to be sent, before February 15th, to the Secretary, S. L. Jones, Esq., Baxter Gate, Loughborough.

EAST SUFFOLK HOSPITAL, IPSWICH.—For a House-Surgeon. Full information, on application to the present House-Surgeon, George A. Angier, M.D. The election will take place on the 9th of February.

ARMY MEDICAL DEPARTMENT.—For Assistant-Surgeons. The Competitive Examination will be held, at Chelsea Hospital, on the 8th of February. Particulars can be obtained on application to the Director-General, Army Medical Department, 6, Whitehall Yard, S.W.

MEDICAL APPOINTMENTS.

BRADSHAW, S., M.R.C.S.E.—Medical Officer and Public Vaccinator for the Halford District of the Shipston-on-Stour Union, Worcestershire, vice R. Staning, M.R.C.S.E.

BURKE, W. M., L.K.Q.C.P.I.—Medical Registrar for Ireland, under the new Registration Act.

BURROWS, George, M.D., F.R.S.—President of the Medical Council.

CAMPBELL, A., L.F.P. and S. Glas.—Medical Officer for the Parishes of Bracadale and Durinish, Inverness-shire, vice Dr. C. Black, resigned.

- CLARKE, William F., Esq.—Surgeon to the West London Hospital.
- CLELLAND, John, M.D.—Professor of Anatomy in Queen's College, Galway.
- CROSS, J., M.R.C.S.E.—Medical Officer and Public Vaccinator for the Hale District of the Prescot Union, Lancashire, vice James Allen, M.R.C.S.E., resigned.
- EADE, P., M.D.—Physician to the Jenny Lind Infirmary for Sick Children, Norwich, vice E. Copeman, M.D., resigned.
- FERNANDES, A. L., M.R.C.S.—Resident Medical Officer to the Sheffield General Infirmary.
- GIBSON, R. E., M.R.C.S.E.—Surgeon to the Jenny Lind Infirmary for Sick Children, Norwich, vice C. E. Muriel, M.R.C.S.E., resigned.
- GUY, T., M.D.—Deputy Coroner for Doncaster.
- HUBBARD, G. P., M.R.C.S.E.—Medical Officer for District No. 6 of the Bury St. Edmunds Incorporation of the Poor, vice T. Coe, F.R.C.S. Eng., resigned.
- HUGHES, D., M.R.C.S.E.—Medical Officer for the Eastern District of the Corwen Union, Merionethshire and Denbighshire, vice D. Hughes, L.R.C.P. Ed., resigned.
- HUGOE, W. P., M.R.C.S.E.—Medical Officer and Public Vaccinator for the West Kenwyn and the Key Districts of the Truro Union, vice J. Moyle, M.R.C.S., deceased.
- ILIFFE, F., M.R.C.S.E.—House-Surgeon to the Coventry and Warwickshire Hospital, vice E. T. Tibbits, M.B., resigned.
- LANE, J. W., M.D.—Medical Officer and Public Vaccinator for the Norbury and the Bishop's Castle No. 2 Districts of the Clun Union, Salop, vice C. R. Larkin, M.R.C.S.E., resigned.
- LOGAN, David D., M.D.—Physician to the West London Hospital.
- MAHOOD, G., M.D.—Medical Officer of the Workhouse and Fever Hospital of the Enniskillen Union, vice J. West, L.R.C.S. Ed., deceased.
- MACKENZIE, G. W., M.R.C.S.E.—Medical Officer and Public Vaccinator for the Croxton District and the Workhouse of the Thetford Union, Norfolk, vice H. W. Bailey, F.R.C.S.E., resigned.
- MACKESON, H. S., M.R.C.S.E.—Medical Officer and Public Vaccinator for the Blankney District of the Sleaford Union, Lincolnshire, vice F. J. Sutton, M.R.C.S.E., resigned.
- MAUDE, F. W., M.R.C.S.—Resident Surgeon to the Royal Sea-Bathing Infirmary, Margate, vice Mr. Waller, resigned.
- MAUDSLEY, Henry, M.D., Physician to the West London Hospital.
- MOORE, D., M.D.—Medical Officer for the Dock Dispensary District of the Belfast Union, vice C. S. Black, M.D., resigned.
- NELSON, S., M.R.C.S.E.—Medical Officer and Public Vaccinator for the Acomb or No. 1 District of the Great Ouseburn Union, Yorkshire, vice Mr. J. M'Millan, deceased.
- OWLES, James A., M.D.—House-Surgeon to the Hospital for Women, Soho Square, W.
- PAGET, George E., M.D.—Re-elected Physician to Addenbrooke's Hospital, Cambridge.
- PATTERSON, W., M.D.—House-Surgeon to the Chorley Dispensary.
- PRIEST, W., M.R.C.S.E.—Medical Officer and Public Vaccinator for the Colsterworth District of the Grantham Union, Lincolnshire, vice T. Asslin, L.R.C.P. Ed., resigned.
- RAYNER, A. P., M.R.C.S.E.—Medical Officer for the Shawbury District of the Wem Union, Salop, vice Mr. T. Drury, deceased.
- RITCHIE, Robert P., M.D., Edin.—Physician to the Hospital for Sick Children, Edinburgh.
- ROBERTS, E., M.R.C.S.—House-Surgeon to the West Kent General Hospital.
- RUSHER, J. G., M.R.C.S.E.—Medical Officer for the Upton-Snodsby District of the Pershore Union, Worcestershire.

- SEABROOKE, W., M.R.C.S.E.—Resident House-Surgeon to the Brighton and Hove Lying-in Institution, vice M. Mackintosh, M.R.C.S. Eng., resigned.
- TAYLOR, F., L.R.C.P.L.—Medical Officer and Public Vaccinator for the Silverstone District of the Towcester Union, Northamptonshire, vice R. W. Cooper, M.R.C.S.E., resigned.
- THURSTON, E. W., L.R.C.P.L.—House-Surgeon to Guy's Hospital, vice W. L. Cass, M.R.C.S., whose term of office has expired.
- TULLOCH, J. S., M.D.—Assistant-Surgeon to the London Surgical Home for Diseases of Women, Stanley Terrace, Notting Hill.
- WHITE, C., M.R.C.S.E.—Surgeon in Ordinary to the Dispensary, at Warrington, Lancashire, vice J. Taylor, M.R.C.S.E., deceased.

DEATHS.

- BADGLEY, Francis, M.D., at Holyrood House, Great Malvern, on Dec. 24, aged 56.
- BAYNE, J., Esq., Surgeon, at Dumbarton, on the 10th inst..
- BEETSON, George, Esq., late Superintending Surgeon, Madras Army at Auckland Villa, Southsea, on January 2.
- BOOTH, Francis, M.D., at Gower Street, London, aged 71, on Dec. 25.—This gentleman was formerly connected with the Webb Street School of Medicine, where he lectured on botany and materia medica. As an author he gained considerable note by his "Lectures on Materia Medica," a treatise on "Marsh Fevers," and the "Life of Dr. Armstrong," which he edited at the dying request of that talented physician, and more recently by his large folio work, in two volumes, on the plants contained in the genus *Carex*. He retired from practice many years since, and subsequently devoted his attention to the cultivation of scientific and literary pursuits. He was a Member of the Council of University College, and at different times Secretary and Treasurer to the Linnæan Society, of which he was also one of the Vice-Presidents.
- BULMAN, Darnell, M.D., aged 68, at Newcastle-on-Tyne, on Dec. 24.
- DAVIS, J. F., M.D., at 13, Royal Crescent, Bath, on Jan. 1, aged 91.
- DERBISHIRE, John, Esq., Surgeon, at 58, Upper Marylebone Street, Portland Place, on December 31, aged 72.
- EVANS, William, F.R.C.S., at Broomfield House, Herne, Kent, on Dec. 30, aged 47.
- GRANT, Sir James Robert, C.B., K.H., at Basford, near Nottingham, aged 91. The deceased was born at Forres, in Morayshire, in 1773. He served as medical officer in the army throughout the whole of the French war, and was chief of the medical department at Waterloo, being one of the few who served in both the first and last campaigns of the French war, viz. in 1793 and 1815. In 1814, when Earl Bathurst was at the head of the War Office, Sir James Grant was appointed Inspector-General of Army Hospitals. In 1811, he received the order of St. Anne of Russia from the Emperor Alexander, in person, as an acknowledgment of the services which he had rendered to the Russian army in France, under Count Woronzow.
- HANNAH, James Lee, M.D., at Pavilion Parade, Brighton, on Jan. 10.
- HARDWICK, Robert George, M.D., Physician to the Leeds Infirmary, at 7, Park Square, Leeds, aged 30.
- HARMAN, Edward B., M.D., at Weeting Rectory, on January 6, aged 62, late of Pembroke Place, Bayswater.
- HASLEWOOD, George D., Esq., Surgeon, at Cradley, near Stourbridge, on Dec. 30, aged 64.
- HOBART, S. H., M.B., at Marlborough Street, Cork, on January 9.
- HUTSON, John Richard F., M.D., at Demerara, on October 13, 1863, aged 67.
- JAMES, Joseph W., Esq., Surgeon, at 25, Nelson Terrace, Stoke Newington, on January 9, aged 37.

NEWBIGGING, Patrick, Esq., Surgeon, at Heriot Row, Edinburgh, on January 10.

SARGINT, Richard, M.B., at Clonmel, Ireland, on January 4.

SLEIGH, William, M.D., at Brixton, aged 67, on December 30.

SMITH, John, Esq., M.R.C.S., connected with the Royal Hospital Schools for 21 years, at Greenwich, on January 17.

SMYLY, Philip Crampton, M.D., at 8, Merrion Square, Dublin, after a short illness from inflammation of the lungs, on January 19.—He was a nephew of the celebrated Sir Philip Crampton, under whom he studied. At the time of his decease, he held the post of Surgeon to the Meath Hospital, and he was also one of the Vice-Presidents of the College of Surgeons of Ireland.

STAIG, James A., Esq., late Surgeon, Bengal Medical Staff, at Maida Hill, aged 52, on January 8.

STATTER, Richard, Esq., Surgeon, at Mount Pleasant, Liverpool, on December 28, aged 38.

VINCENT, Cyril John, Esq., Surgeon, at Oxford, aged 34, on the 14th inst.

WARD, Francis, Esq., Surgeon, late of Balham Hill, at Angel Terrace, Stockwell, aged 57, on December 31.

WHITTLE, Edward Henry, Esq., Surgeon, at Brenchley, Kent, on January 15th, aged 44.

WILSON, Robert, M.D., at Elmbank, Dunoon, Argyleshire, on January 3.

LIST OF BOOKS, ETC., RECEIVED.

"On Diseases of the Heart and Great Vessels." By H. W. Fuller, M.D., F.R.C.P.

"On Functional Diseases of Women, and their Treatment by means of Heat and Cold." By John Chapman, M.D.

"On the Calabar Bean; its Action, Preparations, and Use." By T. Nunneley, F.R.C.S.

"Outlines of Surgery." By F. Le Gros Clark, F.R.C.S.

"Lectures on Syphilis." By Henry Lee, F.R.C.S. (second edition).

"Introductory Address at St. George's Hospital." By Henry Lee, F.R.C.S.

"Military Surgery." By George Williamson, M.D.

"The Journal of Mental Science," for January.

* * Full, as usual, of matter interesting alike to the psychologist and to the general physician.

"The Social Science Review," for January.

* * This very excellent periodical, containing articles upon both general and medical topics, is now to be published monthly instead of weekly, as hitherto. We are glad to learn that it will continue under the able editorship of Dr. Richardson.

"Journal de Médecine Mentale," for November and December, 1863.

TO CORRESPONDENTS.

WE beg to thank our Correspondents, residing in various parts of the kingdom, for their kind communications, and to assure them that, although it has been found impracticable to answer every one by letter, we appreciate none the less their hearty and spontaneous promises of support and co-operation.

In consequence of the space occupied by the Original Papers and Reviews, in the present Number, we are compelled to omit several Bibliographical Notices, as well as matter belonging to other departments of the "Medical Mirror."

THE MEDICAL MIRROR.

MARCH, 1864.

ORIGINAL COMMUNICATIONS.

On some Cases of Tracheotomy, with Observations on its Employment in Diphtheria. By HENRY SMITH, Esq., F.R.C.S., Asst.-Surgeon to the King's College Hospital; Consulting Surgeon to the Westminster General Dispensary, &c.

[Concluded from page 71.]

I MUST, however, leave this part of my subject, and proceed to the second division of my paper, in which I propose to consider the question of tracheotomy in diphtheria—a subject of great importance to us now that the disease is so rife. There must be few operating surgeons amongst us who have not been called upon to decide the question of operating in this terrible and mysterious disease, and, with all my heart, I may say that, notwithstanding the interest attached to these cases, I hope I shall never be called upon again to decide this question; for, unlike the question when connected with the cases of laryngeal disease I have just been considering, there is nothing here but difficulty, uncertainty, and but few rays of hope; nevertheless, these few rays entitle us to consider the subject with the greater attention, and make us endeavour to ascertain whether any confidence can be placed in the operation for this disease. We must bear in mind that not very long since the operation of tracheotomy was considered to be almost useless in the somewhat kindred affection, croup; but of late years it has been satisfactorily shown that a considerable success may be met with when the operation has not been too long delayed. Hitherto our experience of the same treatment in diphtheria

has been so limited that we are not yet able to come to any other conclusion than that in by far the majority of cases where tracheotomy has been performed no good result has occurred, in fact, in all those cases where my own personal friends or myself have operated, this want of success has happened, and it is not difficult for any one who has watched even a single case of diphtheria, or the manner in which death occurs, to understand how it is that so little benefit has resulted from surgical interference; for it may with truth be stated, that the local mischief is merely a manifestation of a constitutional disorder, in which the blood is poisoned with a fearful malady, and so intense is this poisoning that in some cases the operation has not been attended with the slightest improvement to the breathing, although the patient was apparently dying from obstruction in the larynx. In one of the very first cases which came under my notice a few years ago, at the commencement of the epidemic, the symptoms were such as decidedly to warrant operation, and I concurred in the opinion given by two very eminent practitioners that it should be performed; the trachea was opened, a large quantity of diphtheritic deposit was coughed up, but scarcely any relief followed, and the symptoms continued as before, until death followed in a few hours. It is for this reason that I have more than once refused to perform the operation when it was apparently indicated. In one instance a well-known surgeon, who had the misfortune to get diphtheria into his house, requested me to be ready to open the trachea of one of his children, a girl of about 12. She had been suffering for some days, and when I saw her, the symptoms were well marked and distressing, but the urgency did not appear to me to depend so much upon the local mischief as upon the general constitutional disorders, and I was opposed to the operation; at the same time, I stayed in the house during the night, ready to perform it if it was more decidedly called for. This poor girl, after appearing somewhat to rally, died in two or three days, and it was ascertained on post-mortem examination that the disease had extended far below the larynx, and that tracheotomy would have been useless.

Mr. Haynes Walton recently performed this operation in a young woman where the symptoms of dyspnoea were most urgent; this operation was performed most expeditiously, but a large quantity of diphtheritic deposit came from the wound, and the patient died almost as soon as the operation was completed. Mr. Fergusson operated some time since on a young girl where the symptoms were urgent and well marked. Some relief was given for twenty-four hours or

more, but the patient sank soon afterwards into a state similar to that for which the operation was performed, and she died in three days.

In the two last cases of this disease to which I have been called, I followed a different course—in the one case refusing to operate, in the other case I opened the trachea, but I am sorry to say the results were the same; still I must confess, that in the case where I did not operate, the distress was so great, and the scene so pitiable, that I left the house, regretting that I did not press the operation upon the parents. The patient was a young girl, one of three who had been attacked, and as I entered her room, she being unable to speak, clasped my hands, urgently demanding by her gestures that relief which I could not make up my mind to afford her, as it was a well marked case of the disease. She died in a few hours. No post-mortem was allowed.

In the other case, which occurred to me but very recently, I performed the operation, and I will detail the particulars.

Miss W., aged 22, had returned from Italy to this country, and had been for some time suffering a good deal of mental and physical trouble through attending upon her mother, who had undergone a severe operation. She was seized with a rigor on Sunday, September 7th, and on Tuesday evening, the 9th, I was called to her, and found her complaining of her throat. On the left side of the fauces there was a circumscribed red patch and the appearance of an approaching abscess, with the ordinary constitutional fever. On the following day, enormous swelling of the neck on the same side took place, but this was unattended with pain. The treatment consisted in the use of morphia at night. Linseed-meal poultice outside the throat. Nitro-hydrochloric acid internally, and plenty of wine and beef-tea. On the Thursday and Friday there was much difficulty in swallowing, and expectoration of muco-purulent matter. The external swelling, however, had almost entirely diminished, but the inflamed patch in the fauces, instead of dissolving or forming an abscess, had on its surfaces shreds of semi-purulent matter hanging about it. The general health kept up. The fever had diminished, and the tongue remained moist. She was ordered to gargle the throat frequently with port-wine and water. On Saturday the 19th, five days after the attack had manifested itself, I first became anxious, for although the external swelling had entirely gone, and the pulse was below 100, I noticed that the patient had entirely lost her voice, and that the patchy condition of the fauces had extended to the right side. At 1 A.M. on Sunday, the 14th, her sister saw her before going to bed, and she then noticed

a croupy sound, but nothing else to alarm her. At 10, I saw her, and it was at once evident that her larynx was affected, for the countenance was dusky, and the angles of the mouth were drawn down; the patchy condition of the fauces had increased, and there was a great deal of tenacious matter about. I ordered her at once a powerful emetic of sulphate of zinc. At 12, Mr. Hancock saw her with me, and agreeing with me that tracheotomy would probably be required, considered, that as the lungs were perfectly well filled with air, some other measures should be tried first. He advised that the throat should be well swabbed with a strong solution of hydrochloric acid and chloride of potash. I effected this myself, and got away a large quantity of secretion, and the patient expressed herself as much relieved. At 2.30, I was suddenly summoned to her, and found her just expiring from asphyxia. I immediately opened the trachea, and introduced a tube. The lungs became inflated, the pulse became firm, and the lividity of countenance almost entirely disappeared, but the patient remained in a state of stupor such as I never witnessed after tracheotomy, when the air was entering the trachea well, for several hours. At 10 P.M., however, she was sensible, able to take nourishment, and she passed a comfortable night. At 10 A.M. on the 15th, we saw her together. She was then quite sensible, and took her nourishment well, but her face was livid, and soon after our consultation her pulse suddenly disappeared, and the poor girl complained by signs of a terrible oppression in the cardiac region. From this time she gradually got worse, and died tranquilly twenty-four hours after the operation.

Now, this was not a case of pure diphtheria, as is generally met with, but it was undoubtedly of a diphtheritic character, presenting its most formidable and insidious aspects. Now, it would be thought that tracheotomy would be very likely to save life here, because it was evident from the symptoms and their duration, that only the upper portion of the larynx was involved. And this was proved at the operation; for on opening the trachea none of that deposit was met with, as is generally the case when the operation is done for pure diphtheria, showing that the trachea is lined with it; but yet the result was the same, as unfortunately happens in most cases—temporary relief; but, at the same time, such symptoms of general blood-poisoning as to determine the futility of the surgeon's art. Some are inclined, I believe, not to adopt the operation at all in diphtheria, but it is a distressing thing to turn away from a patient apparently dying from asphyxia, and not give them the only chance which presents to us; there is, moreover, at least one well-

authenticated case of recovery after the operation recorded by Dr. Hillier in the "Medical Times and Gazette," for February 23, 1861. It is the more interesting to us, as the patient is a member of our own profession. This case, which is worth careful perusal, most certainly encourages us not hastily to refuse operating, even to the most desperate cases, and although my own observation and experience has been so discouraging, I, for one, will not refuse to operate, if the patient be evidently dying from asphyxia. And here, before I conclude, I may suggest whether, in some of these cases, Dr. Richardson's view may not be the correct one, that death takes place from a firm clot being established in the heart, as certainly occurs in some cases of croup. In the instance I have related, the sudden failure of the pulse for hours before death and the distress at the region of the heart, decidedly pointed to this morbid phenomena. Of course, if it does often exist, and is found many hours before death, the reason is obvious why tracheotomy fails.

One word before I finish about the mode of performing tracheotomy. In my last paper I discussed the question at some length, as to the best modes of performing it, and whether it is better to proceed slowly and cautiously, or to make our incisions rapidly, for the purpose of avoiding those difficulties and dangers in the operation, which a surgeon who has operated much will recognise as real, and not as too many merely learned in the operations in the anatomical theatre, or the dead-house, imagine. When I wrote that paper I had had a large experience of this operation at all ages, from the infant of six months old to the other verge of life, and under all conditions. Since then my experience has been increased; and, inclined as I then was to recommend a rapid operation, I am more disposed than ever to recognise its superiority over the other method, in a surgeon who has confidence in himself. The sad mishaps which have occurred during this operation are much more frequent than people imagine, and they are due to two causes; in the first place, to an idea unfortunately too prevalent that tracheotomy is very simple; and in the next place, to the practice of operating slowly, and allowing time for blood to enter the air-passages. I may mention moreover that I am more than ever inclined to trust simply in a sharp scalpel, and a tenaculum, for the purpose of baring and opening the trachea, and not to put any faith in those ingenious tracheotomes, which look well in the cutler's shop, and should there be allowed to remain.

Report of Two Cases of Double Complicated Hare-Lip,⁵ treated successfully by Operation. By D. LLOYD ROBERTS, M.D., M.R.C.S.L., Surgeon to St. Mary's Hospital, Manchester, &c.

CASE I.—*Double Complicated Hare-Lip with corresponding Clefts extending through the Hard and Soft Palates.*

ALICE I., aged 4 months, was admitted under my care into St. Mary's Hospital, on June 25, 1861.

This patient had a double hare-lip, the clefts passing into each nostril. The nose was flattened, and the alæ nasi widened and expanded. A broad fleshy tubercle, proceeding from the septum of the nose, projected forwards in a direction almost horizontal, in front of the alveolar process of the superior maxilla. Resting on this tubercle, in front, and hanging from the septum nasi, was a piece of integument which would have formed a part of the upper lip if it had not been pushed forward out of its natural plane by the projecting tubercle. The intermaxillary bone, which projected greatly forwards, formed the basis on which this tubercle rested. The fissure on the right side was narrower than that on the left by several lines. The angles of the mouth were very much retracted, a result evidently owing to the unopposed action of the buccinator muscles; the orbicularis oris, which should have antagonized them, being, in effect, paralyzed, from the two clefts which passed entirely through it. The angles of the mouth were much thinner and less fleshy than usual,—a circumstance which added to the difficulties of the case. Through the two clefts in the upper lip, the play of the tongue was distinctly visible.

The interior of the mouth presented, on examination, a large and irregular cavity, which included the nostrils and throat, and was divided only partially by a septum, which was continuous with that of the nose. The appearance thus presented was pitiful in the extreme. The child was small, wan, puny, and cachectic, and the face wore a constant expression of pain.

Great difficulty was experienced in feeding the child, owing to the milk which constituted its food being spirted forcibly by the act of deglutition from the mouth and nostrils. In fact, it was evidently languishing and dying from lack of nourishment. The bowels were continually relaxed, and the motions very offensive. The first few weeks after admission were occupied in endeavours to improve the general health of the patient preparatory to operation. It was essential to the success of the operation to press back the piece of integument resting on the projecting fleshy tubercle already mentioned to

the level of the upper lip, with which it was to be united, and of which, indeed, it normally formed a portion. This could only be effected by first removing a portion of the hard, bony base on which the tubercle rested, and this course, after mature reflection, I resolved to adopt.

Accordingly, on August 15, 1861, the child was brought for operation, its arms and legs secured in the usual way, and held on the knee of an assistant. I commenced the operation, having decided on confining my endeavours to secure a union on the right side in the first instance, leaving the other side to a subsequent operation.

The central slip of integument was first dissected from the projecting tubercle on which it rested. The whole of the latter, together with as much of its bony basis as was thought necessary, was then removed by means of the bone forceps. A free jet of blood poured from a divided artery; the bleeding was, however, soon controlled by the application of a stream of cold water and exposure to the atmosphere. I next dissected, for some distance, an attachment which existed between the upper lip and the gum. The central piece of integument having thus been brought to the same plane with the upper lip, so as to admit of perfect apposition between the two; the edges of both were now pared by transfixing the lip with a scalpel near the angle of the fissure, and drawing it gently downwards so as to make an even and regular wound. The edges thus pared were brought together by introducing two fine pins, inserted as near the mucous membrane as possible. The approximation was completed and secured by the customary twisted suture, the ends of the pins cut with the forceps, and a few straps of plaster laid on to cover the whole. The child was ordered to be fed at regular intervals, and to have a single drop of laudanum every three or four hours to counteract restlessness.

On the morning of the third day I removed the dressing and pins, and found that union had taken place. The parts were guarded against being put upon the stretch by strips of adhesive plaster carefully applied across the lips and cheeks. On the 14th day all dressings were discontinued, the parts being now firmly united, and all tenderness having nearly disappeared. After the lapse of six or seven weeks the operation was repeated on the opposite side, in precisely the same manner, and with an equally satisfactory result. She left the hospital on December 31st, 1861. The appearance of the patient both before and after the operation is well represented in plate No. 1.

CASE II.—*Double Complicated Hare-Lip with total deficiency of Hard and Soft Palates.*

William J., æt. 5 weeks, was brought to me at St. Mary's Hospital, on June 13, 1862.

History.—He is the sixth child of very healthy parents. His mother states that she has had four brothers and three sisters, all of whom were well developed, and perfectly free from deformity either in themselves or their families. The father had one brother, who was perfectly well developed, and he is not aware of any member of his family having been the subject of deformity. I myself saw the maternal grandmother of the patient, and she appeared to be a well-formed and intelligent woman. I was informed by the mother that, when she was about six months advanced in her pregnancy, and was one day crossing a street, she was severely frightened by a horse. With the exception of the deformity, the patient is a fine and intelligent child, having a well-formed head and forehead; the upper part of the face is peculiarly interesting and handsome.

The following are the appearances which present themselves on examination. There are two clefts in the upper lip, both passing into the nostrils, the right fissure being by far the most extensive. The nose is flattened, very broad at its base, and the alæ much expanded. The intermaxillary bone is broad, extensive, rounded, and projecting. Attached to the tip of the nose, and covering the intermaxillary bone, is a piece of integument, which appears to be the central part of the upper lip, disconnected from the lateral portions of the same organ by being pushed forwards out of its natural plane by the projecting intermaxillary bone. The piece of integument is of greater extent than it appears, being much corrugated, and admitting of being considerably stretched. Passing to the examination of the internal parts, there is a cleft in the alveolar process of each superior maxillary bone corresponding with those on the lip, the left fissure being the largest, and bevelled obliquely for some distance along the alveolar process of the jaw. The palatine processes of the superior maxillary bones, and the palatine plates of the palate bones, are also deficient, as is also the whole soft palate. In fact, the mouth, the nares, and the pharynx form together one large irregular cavity, the vomer forming a partial septum in the upper part. The tonsils, very small in size, can be seen posteriorly.

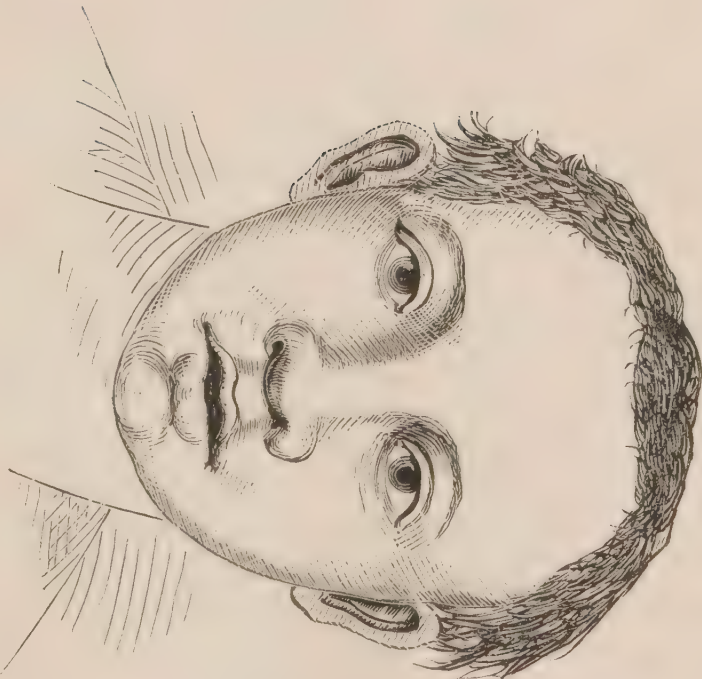
Bringing the result of my previous experience to bear upon this very complicated case, I deliberated upon the best mode of effecting a cure by surgical means. To supply and

FIG. 1.



Representation of the Double Hare-Lip in Alice I, before operation, at the age of five months.

FIG. 2.



Representation of the same after operation, at the age of ten months.

complete, as far as possible, the parts which nature had left unfinished, was the natural and most obvious means of accomplishing my purpose, and this I resolved to effect by two operations at separate intervals. I decided to avoid removing, except in case of absolute necessity, any portion of the projecting tubercle and the intermaxillary bone on which it rested, as the latter contained three teeth which it was very desirable to preserve. I hoped, by paring the edges of the fissure and securing union on the right side, that an amount of pressure would be brought to bear upon the projecting tubercle sufficient, by its continued action to depress it to the level of the jaw, and if this should fail, I proposed to effect the same result by means of artificial pressure applied a day or two before the second operation.

On January 4, 1863, I proceeded to perform the first operation, in pursuance of the plan stated above. Seizing with a pair of forceps the outer angle of the fissured lip on the right side, I severed its attachment to the gum with a few light strokes of the knife. With the same scalpel I proceeded to pare the edges of the lip, the coronary artery being compressed by an assistant. I now took up the central piece of integument, which was attached to the tubercle, dissected it from its attachment to the latter, and pared its outer edge, so as to adapt it to the raw edge already pared on the opposite side of the fissure. I then very carefully brought the two edges together, and maintained their apposition by transfixing them with the ordinary hare-lip needles. The junction was still further secured by the application of a thread twisted in the ∞ form. The ends of the needles were then cut and the skin protected from injury by pledgets of lint placed underneath them. Straps of common plaster completed the dressing.

On the 6th of January, being the 3rd day, the sutures were untwisted and the pins withdrawn. Union was found to have taken place. The parts having been carefully cleansed with a sponge and some water, the lip was covered by adhesive plaster, the cheeks being previously drawn forwards as much as possible, to prevent any strain on the newly united edges. The same dressing was repeated for some days, until the parts were firmly united, and all tenderness had disappeared. The appearance of the child was so greatly improved by this operation, though still incomplete, that many persons who saw him were surprised at the result.

I persevered in carrying out my plan of attempting a cure without the removal of the projecting tubercle. By making gentle pressure upon it from time to time, I suc-

ceeded in pushing it backwards to such an extent as to make a very material improvement in its position.

On May the 7th, 1863, I proceeded to perform the second operation. The process was precisely similar to the first, and the parts were successfully brought together without the necessity of removing any portion of the projecting tubercle. As in the former case the pins were removed on the third day, and the same dressings were repeated. The appearance of the child just before leaving the hospital is well represented in the drawing No. 4, and forms a contrast truly remarkable with the hideous aspect which it presented previous to the operation.

I had an opportunity, with my friend Mr. Ormerod, of examining the condition of the parts a short time ago. They presented the following appearances:—On the right side the intermaxillary bone is closely connected and even with the alveolar process of the superior maxilla. On the left side there is a slight notch or deficiency of the alveolar process of the superior maxillary bone.

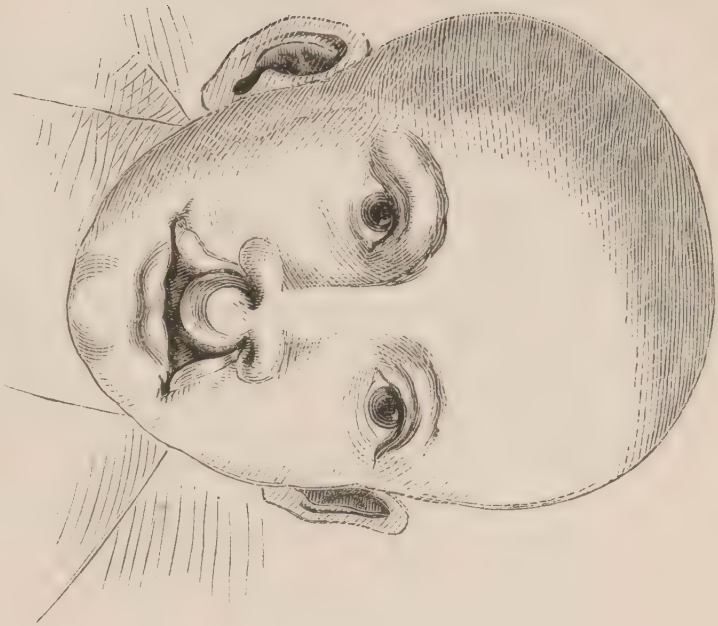
The approximation which had been effected in the intermaxillary bone and the superior maxilla on the right side, was so close that the edges of a sheet of paper could with difficulty be passed between them.

Remarks.—The operation of hare-lip is of very considerable antiquity. The total silence of the Greek physicians regarding it, leads us to infer that if ever they were acquainted with the deformity they were at least unprepared with any means for curing it. Celsus, however, treats of it, though his remarks are rather obscure. He appears to direct, in case of double hare-lip, the removal of the central portion, and the insertion of a portion of integument taken from some neighbouring part.

I propose to direct my attention principally to the difficulties which present themselves in double hare-lip, paying comparatively little attention to the single variety, as comparatively simple and less difficult. La Faye first proved the curability of double hare-lip even in cases of great deformity and separation of the palate bones. This he demonstrated from his own observations, as well as from those of Gérard and Quesnay. M. Louis divided the operation into two stages, and awaited the perfect cure of one of the fissures before undertaking that of the other. This step, in appearance very simple, proved in reality of immense importance, and his success was very great.

The age most eligible for the operation has been the subject of great difference of opinion. Sir Astley Cooper recommended

FIG. 3.



Representation of the Double Hare-Lip in William J., before operation, at the age of six weeks.

FIG. 4.



Representation of the same after operation, at the age of twelve months.

the postponement of the operation till after the second year, when the dangerous period of dentition was past. Dieffenbach, whose opinion is based upon the experience derived from one thousand operations, advocates a similar delay, stating also that when the operation is performed very early the cicatrix is liable to yield with the advance of growth. Roux preferred operating at once in double hare-lip, but saw no reason for haste in the simple variety. Dubois, on the contrary, advocated immediate operation in simple hare-lip, but preferred delay in the case of the double fissure. Although I have performed the operation so early as a few days after birth, yet I am inclined, with Houston, Bryant, and others, to select the third month as the most eligible period, because, as Mr. Bryant remarks, in one of his admirable Lettsomian Lectures on the Surgical Diseases of Children, published in the "British Medical Journal," for 1863, "the vital powers of the child have become fairly established, and will be able to resist the tax upon their strength, which is necessarily occasioned by any operation."

It will be seen from the foregoing cases that I am in favour of the division of the operation into two stages, notwithstanding that some very able practitioners advocate simultaneous operation upon both fissures. I believe that the first-named method is by far the most prolific in successful results, and have witnessed great disappointment consequent on the adoption of the latter process. Although, in my opinion, it makes comparatively little difference whether pins or sutures are to be preferred in effecting the union of the parts, still my own predilections are in favour of the former.

On the Treatment of Whooping-Cough, by the Administration of the Bromide of Potassium. By W. ABBOTTS SMITH, M.D., M.R.C.P., Lond., Physician to the Metropolitan Free Hospital, and to the Finsbury Dispensary, &c.

FEW affections are more uncertain in their duration, or more difficult of speedy cure, than whooping-cough, notwithstanding the great attention which its pathology and treatment have received at the hands of many able physicians. With the pathology and mode of propagation of this disease it is not my intention to deal here; but it may not be altogether out of place to venture the remark, that in the anxiety which has been displayed on the part of medical men to discover a specific remedy for whooping-cough, the fact has been apparently too much lost sight of that, like

almost every affection, whether of the respiratory or other organs, the causes may be very different in a given number of cases, so much so, indeed, as to render any particular drug, potent though it may be in one form, completely inert in another form of the affection. Still there are certain remedial agents which are more or less applicable in all varieties of pertussis, owing to their sedative action upon the pneumogastic nerve, which is probably always implicated, to a greater or less degree, in this disorder. Of these medicinal substances, the bromide of potassium, like the analogous salt, the bromide of ammonium, may be fairly considered as one which is most worthy of a trial; I have, for some time past, been in the habit of prescribing it in the treatment of whooping-cough, and the results which have been obtained, have, upon the whole, been of a very satisfactory nature. The following description of four of the cases thus treated is taken from my notes:—

Case. I. Henry G., aged $5\frac{1}{2}$ years, was admitted under my care on the 19th of September. He had suffered from whooping-cough for several months, and this was, according to the statements of his friends, the *second* time of his being attacked by that affection. The boy lived in a damp and otherwise unhealthy part, near Bethnal Green; and his father died of consumption in 1860. He was much emaciated; the circulation was feeble; the lips and the alæ nasi were blue and congested; and there was great dyspnoea, with wheezing and cough upon the slightest exertion. The excretory functions were regular. The patient was ordered to take a drachm of cod-liver oil, with a corresponding quantity of vinum ferri, three times daily.—September 26. The boy's general health was somewhat better; the amount of cod-liver oil was directed to be increased to two drachms in each dose.—October 3. The condition of the patient was much improved, but the troublesome "whoop" remained almost, if not quite, as severe as when he was first brought to the hospital. The medicine first prescribed was discontinued, and in its place I ordered three grains of the bromide of potassium to be taken thrice daily, with infusion of quassia.—October 10. The paroxysms of coughing were much less violent and less frequent, occurring chiefly at night, and early in the morning. The dose of the bromide was increased to four grains.—October 14. The convulsive "whoop" had completely disappeared, and, after taking some simple saline medicine for the bronchitic cough which remained, the patient was discharged, cured.

Case II. Thomas C., aged 11 years, came under my care on the 26th of August. He had had whooping-cough during

the whole of the summer, the attack dating from the third week in May, when the infection broke out in an epidemic form amongst the boys at the school where he was placed. He was very thin, and was stated to have lost more than eight pounds in weight since the spring. The countenance was pale, and wore a peculiarly anxious expression; the conjunctivæ of both eyes were considerably suffused with blood, and the lips were of a bluish colour and fissured with numerous cracks. The tongue was covered with a brownish fur, and was thickly studded towards its base with minute aphthous ulcers. As I suspected, from the general account which I received of the patient, that intestinal worms were present, I prescribed a powder, composed of eight grains of compound scammony powder and four grains of santonine, to be taken with two drachms of castor oil on the following morning; and for the alleviation of the cough, five grains of bromide of potassium, twice a day, in half an ounce of water. August 29. The mother of the patient brought to the hospital two lumbrici, one about three inches, and the other rather less, in length, which she informed me were passed four hours after the powder had been taken. I directed the bromide of potassium to be continued three times daily, and a gargle of chlorate of potash to be used occasionally, in order to cure the aphthous condition of the mouth. September 5. The boy was more lively and in better health than he had been for several months, and the cough had almost lost its spasmodic character. Soon after this date, some ordinary cough medicine was substituted for the bromide of potassium mixture, and within ten days a complete cure was effected. I have recently learnt from the boy's mother that he has continued in excellent health since he was under treatment.

Case III. G. P., 6 years old, was admitted on the 30th of September, having suffered from whooping-cough for rather more than two months. The disorder had been partly subdued by the administration of ipecacuanha, &c., under the advice of a medical gentleman resident in Islington. The tendency to paroxysmal cough still remained, however, and severe fits of coughing came on occasionally, being more frequent in the evening and at night than during the day. The patient was ordered to take four grain doses of bromide of potassium three times a day. October 10. The health of the patient was very greatly improved, and, with my approval, she was sent to a relative's house, in Surrey, for change of air. The medicine was directed to be continued. October 24. The patient was brought to me, perfectly recovered from the cough, and I was informed that as the "whoop" had left her

soon after her visit into the country, the medicine had been discontinued for more than a week past.

Case IV. Mary B., aged 8 years, was placed under my care on the 2nd of September. She had suffered from whooping-cough for six or seven weeks, and the nocturnal paroxysms were especially severe, and sometimes attended by convulsions. She was a poor, cachectic-looking child, with evident marks of the scrofulous diathesis; the cervical glands were much enlarged, and the abdomen was hard and swollen. I ordered the compound soap liniment to be well rubbed into the neck, upper part of the chest, and abdomen every night and morning; and two teaspoonfuls of cod-liver oil with half an ounce of liquor calcis to be given thrice daily. September 9. The child's general health had much improved, and I prescribed three grains of bromide of potassium to be taken three times a day. September 16. The cod-liver oil was directed to be discontinued, and the bromide of potassium mixture only to be taken, the dose being increased to five grains. September 23. The patient was discharged, cured, as she had not "whooped" for ten days, while the other symptoms of the cough had entirely left her. In order to render the improved health of the child permanent, a supply of cod-liver oil for a fortnight from this date was allowed, and the letter of admission was continued for that time, so that it might be ascertained whether the whooping-cough would return. It did not do so, however, and the patient's letter was accordingly given up at the expiration of two weeks.

Remarks.—As may have been gathered from the observations which preceded the description of the foregoing cases, I do not believe in the existence of a *specific*, properly so called, for whooping-cough; and it is therefore necessary that I should make some few comments upon the cases and the treatment which was adopted, particularly as the circumstance of my prescribing the bromide of potassium in every case (and I may here mention that I have used it in many others), affords presumptive evidence that I give it credit for curative properties in the treatment of the disorder under consideration. It will be further seen, from the perusal of the cases, that my first care is to inquire into the general health of the patient; this point having been settled, and due provision made against constitutional failings, the bromide of potassium is given for the purpose of relieving the spasmodic "whoop," which characterises pertussis, and, when this has once been fairly got rid of, the patient commonly makes a rapid progress towards recovery. The same result is often

observable after the administration of the bromide of ammonium, of the value of which as a therapeutic agent in whooping-cough evidence has been given by Dr. Gibb, Dr. Harley, and other accurate observers. So far as I have had opportunities of judging, the two salts are of nearly equal value in the treatment of pertussis; and this fact does something towards establishing the correctness of the theory, that the favourable medicinal effects of most salts depend, not upon the metal of which they form the compounds, but upon the non-metallic element which they contain. Mercury, when taken in the metallic form, is almost destitute of effect upon the system, excepting to such an extent as might be expected from a substance of its peculiar fluid and rapidly-moving property, but when combined with chlorine, either as a chloride or bichloride (or, as the new Pharmacopœia more properly styles them, the subchloride and chloride), powerful agents are created, and the effects become strongly marked. From this, and corroborative facts, it is probable that the metal, constituting the base, is often simply the almost inert vehicle for an active remedial substance; and it is on this account, that we may expect, as results prove, nearly similar results from the administration of the bromide of potassium and the bromide of ammonium. The dose of the former preparation which I have ordinarily adopted is rather less than that which is given by some physicians who employ this remedy. My chief reason for giving the smaller dose is, that I have usually seen more permanent effects produced by moderate doses, perseveringly administered, and gradually increased if it be requisite, than by the immediate use of the bromide of potassium to a relatively larger extent. As a striking instance of this, I may mention the case of a youth, aged 18, to whom I administered bromide of potassium in five-grain doses, repeated at short intervals, until complete anæsthesia of the fauces and soft palate was induced, with the view of cutting short the attack of whooping-cough from which he had suffered for some months previously. The "whoop," and, in fact, the other symptoms, disappeared with almost alarming suddenness, but, after two days, the paroxysms were as severe as they had ever been before the use of the remedy. I then gave five-grain doses three times a-day, and, under this treatment, occasionally varied by the administration of expectorants, of which the spiritus ætheris nitrosi was the chief, the patient got quite well in the course of twelve days. It has been recommended to give either of the bromides in the proportion of one grain, or sometimes more, to each year of the patient's age, but I have seldom found it necessary to push the drug so far.

Of the other remedies for whooping-cough it will not be requisite for me to speak. Each of these has its advocates, and in certain cases may, doubtless, be of service, while many of them are certainly not to be despised, nor to be omitted from consideration in the treatment of a case of pertussis of more than ordinary pertinacity.

The due regulation of the diet of the patient ought not to be lost sight of in this disorder; nor, should it be forgotten that change of air, involving, as it generally does, change of habits, will often do wonders when medical skill is unavailing to complete a cure. From the time of Hippocrates and Celsus to the present day, this fact has been universally recognized with regard to most disorders, and in none is it more apparent than in those which are included in the miasmatic order of zymotic diseases, amongst which whooping-cough may be most properly placed.

REVIEWS AND NOTICES OF BOOKS.

The Science and Practice of Medicine. By WILLIAM AITKEN, M.D., Professor of Pathology in the Army Medical School, &c. Two Volumes, pp. 727 and 1095. Second Edition. London: Griffin and Co. 1863.

SECOND NOTICE.

THE notice of Dr. Aitken's work, contained in the first number of the "Medical Mirror," was necessarily brief, owing to the circumstance that only a few days elapsed between its publication and the issue of our periodical; and we therefore now propose to make some further comments upon it.

Amongst the preliminary chapters in the first part, where various general points connected with pathology are discussed, the most important is that in which the author describes certain complex morbid states, including fever, inflammation, and degeneration of tissue. The examination of the excreta, especially the urine, for the purpose of ascertaining the extent of febrile pyrexia, has been resorted to from the earliest periods of medicine; but a more recent aid to diagnosis, the thermometer, is almost unknown in this country, although its great utility in the diagnosis and prognosis of all cases attended by increased temperature of the body is undeniable. The merit of its introduction into practice is due to Professor Wunderlich, of Leipsic, of whose laborious observations upon the temperature of the body, in

persons suffering from fevers and other affections, some idea may be formed when it is stated that his extensive experience embraces "at least half a million exact thermometrical observations, following the continuous progress of individual diseases, the results of which are compared in more than 5,000 patients."

The normal temperature of the human body, at the completely sheltered parts of its surface, is about 98° Fahr., and it is almost unchangeable in healthy individuals, the variation, which is generally observed after taking food, not being more than one-half of a degree; any notable deviation from the ordinary temperature, either by its rising above $99^{\circ}5$, or sinking below $97^{\circ}3$, affords a sure sign of the existence of disease. The fluctuations of the temperature of the body during illness should be especially noted, and so constant are the phenomena which are attendant upon these fluctuations that regularly continuous observations of the temperature alone, even without the consideration of other symptoms, will often enable the physician to determine whether the attack of illness is likely to be mild or severe. If, for example, the temperature rises beyond 106° Fahr., and up to 108° and 109° Fahr., a fatal issue may almost, without doubt, be expected in a short time.

In some affections, a single observation of the abnormally increased temperature may be sufficient for the establishment of a positive diagnosis. If, for instance, a person, who on the previous day was healthy, presents in the morning a temperature above 104° Fahr., it is almost certain that he is the subject of an attack of ephemeral fever, or of intermittent fever; and, should the temperature rise up to 106° Fahr., or beyond that point, the case will turn out to be one of intermittent fever. Or, if the temperature of the patient rises during the first day of his illness to 106° Fahr., it is certain that he does not suffer from typhus fever. If, again, in a patient, under eighteen years of age, in whom the general symptoms of typhus fever are present, the temperature of the body should sink, without any external cause, below $103^{\circ}3$ Fahr., on any evening during the second half of the first week of illness, or during the first half of the second week, it is a sure indication that the case is not one of typhus. As a further evidence of the value of thermometrical observations, let us suppose that a person is suffering from the general typical signs of pneumonia, but that during the development of the disease, the temperature never reaches $101^{\circ}7$ Fahr.; in such a case it may be positively concluded that no croupous or inflammatory soft infiltration is present in the lung.

The best thermometer for diagnostic purposes is one

having a uniform and correct scale, ranging from 88° to 110° Fahr., and showing fifths of degrees. Daily observations of the range of temperature should be made throughout the whole course of the disease, while the pyrexia lasts. Two observations daily will suffice for most cases in private practice, but they should be made at the same hours; the best periods for making them are between 7 and 9 in the morning, and between 5 and 7 in the evening. In the less important cases one observation may be made daily by the physician, and the other can be delegated to the patient, or to his friends or nurse.

It has been recommended by some to place the bulb of the thermometer under the patient's tongue, but Wunderlich objects to this, as being one of the worst places at which the temperature can be taken, owing to the continual variations which are caused by the cold air which is drawn into the mouth during the act of inspiration. He recommends the axilla as the best place for making thermometrical observations, and says that the mercurial bulb should be introduced horizontally into this hollow, and kept in close contact with the skin at the bottom of it, so as to be completely and firmly surrounded by the soft parts. Great care must be used in reading off the result, and "the head of the observer and the instrument must be so arranged that the axis of vision shall fall perpendicularly in the column of mercury in the tube." If the instrument does not rest completely within the axilla, or if its position be in any way changed, the temperature may appear to differ as much as 1° to 2° Fahr. from what it really is. In ordinary observations, not requiring extreme accuracy for scientific purposes, five or six minutes will suffice for the application of the thermometer, which should be previously warmed by holding the bulb in the hand, or dipping it into water of a temperature of nearly $99^{\circ}\cdot5$ Fahr. If two observations made at an interval of one or two minutes give exactly the same result on the scale of the thermometer, we may be satisfied as to their accuracy.

Few subjects connected with pathology have been more frequently written upon, or more often rendered still more mysterious and incomprehensible than inflammation. When we compare the concise definition of Celsus, "*Notæ vero inflammationis sunt quatuor, rubor et tumor, cum calore et dolore*" (Lib. II, sect. 10), and what he elsewhere says concerning this morbid condition, with the mass of matter which has been written upon the same subject at various times, before the introduction of the microscope and improved means of pathological research, we are inclined to give the palm for clearness, and at any rate, for brevity, of expression to the

venerable Roman, notwithstanding the fact that his description was drawn up nearly two thousand years ago. With the perfection of the microscope, we may be said to have commenced anew the study of pathology, and it is advisable, in the consideration of the phenomena attendant upon inflammation, to pay attention chiefly to the statements of modern investigators. Dr. Aitken gives an excellent abstract of these in the chapter on inflammation.

The different forms of degeneration of tissues, comprising the fatty, and mineral, or earthy varieties, pigmentary degeneration, in which form pigment takes the place of the minute elementary tissues, as fat or lime salts do in the two first-named forms, and amyloid, or albuminoid degeneration, are all ably described by the author.

The fact that types of disease vary at different periods of time has been often questioned upon, as we think, insufficient grounds, and a disbelief in it forms the basis of one of the senseless charges occasionally got up by those who, knowing nothing themselves of the matter, declaim against modern practitioners for alleged inconsistency. We should recommend those who are sceptical on this point to read the eighth chapter of Dr. Aitken's work, in which they will find such an amount of evidence in favour of the doctrine as will, at least, greatly shake their scepticism, if it should not altogether remove it.

In our previous notice we remarked that the author had made some changes in his classification of diseases. These changes are all based upon sound grounds, as will be evident after a perusal of that portion of his work which treats of nosological arrangement; and, as our knowledge of pathology becomes more extended, there is no doubt but that our nosological tables must be still further modified.

The first class of diseases separately described by Dr. Aitken is that of zymotic diseases, to which nearly 25 per cent. of the total number of deaths which occur in Great Britain may be attributed; nor, indeed, is this to be wondered at when we bear in mind that in this class are included cholera, continued fever, scarlatina, whooping-cough, small-pox, measles, and many other destructive maladies. Zymotic diseases may be divided into four orders, viz., miasmatic, enthetic, dietic, and parasitic diseases.

The affections which constitute the miasmatic order have at least three distinct sources of origin;—1st. Palludal malarious poison; 2nd. Animal malaria poison; 3rd. Specific disease poisons; and they are chiefly disseminated through the media of contaminated persons, food, water, and other agents, or through infected air. The miasmatic order com-

prises all the exanthemata, the continued, intermittent, remittent, and mucous fevers.

Foremost amongst the eruptive fevers comes small-pox, of which disease a valuable account is given, together with some interesting tables showing the range of the temperature of the body in the different species of small-pox. We may here mention that similar tables will be found with the description of the other febrile affections, in all of which thermometry forms a valuable aid to diagnosis. The author does not believe in the existence of any specific for variola, and he consequently follows out the plan of treatment usually adopted, viz., to keep the patient cool, to administer mild aperients and salines, to use some soothing application, such as glycerine, alone or in combination with other substances, in order to allay the irritation, and to carefully watch for complications as they may arise. This general plan of treatment, with certain modifications to meet the requirements of the case, as in the administration of wine in the early stages of scarlet fever, which is highly advocated by Dr. Aitken, will be found suitable to most of the exanthemata.

In his first edition, Dr. Aitken, speaking of continued fevers, stated his belief that the two forms, typhus and typhoid, were identical in their nature, and that they were merely varieties of a fever arising from the same specific poison. He now admits that the contrary appears to be the proper view, and gives important and, as it would seem on perusal, almost irrefutable evidence, selected from the writings of both British and continental authorities, in support of the non-identity theory. Much of the doubt and confusion connected with this question has arisen from the loose and inaccurate manner in which authors, especially when writing on surgical affections, use the terms "typhus" and "typhoid." If a patient's vital powers become depressed after a severe shock or injury, after gangrene, after suppuration, or similarly exhausting causes, he is said to suffer from "typhus" or "typhoid" fever. Now, this severe form of symptomatic fever has really, as is remarked in Druitt's "Manual of Surgery," "no relation to the typhoid fever, or typhus." Then, why retain the terms in such instances as those referred to? The workings of nature in regard to disease are not yet too well understood, and there is no room for self-mystification on our part. The readiest way which we can suggest for remedying this unsatisfactory nomenclature is the constant substitution of the term "enteric," or "intestinal," for typhoid fever, and this alteration would have the further advantage of clearly distinguishing this form of continued fever from

typhus, which is so like the other name in sound as to tend to the confusion of one with the other.

In regard to yellow fever—a scourge from which we are fortunately spared in this country—Dr. Aitken agrees with Professor Maclean in the opinion that true yellow fever is specifically distinct from remittent or intermittent fevers, with which many writers consider it as identical in kind, although varying in degree.

Under the heading of mucous fevers the author groups together influenza, whooping-cough, diphtheria, croup, dysentery, diarrhoea, and cholera. They are all attended by fever, and are characterized by irritation, specific lesions, or altered functions of some portion of the mucous membrane, either of the respiratory or the alimentary passages.

In the description of the pathology of diphtheria, Dr. Aitken attaches importance to the relation which exists between this affection and the presence of albumen in the urine, to which phenomenon attention was first directed by Dr. Wade, of Birmingham. This abnormal constituent is found in the urine of the majority of diphtheritic patients, and usually makes its appearance about the seventh or eighth day from the commencement of the disease, although it may occur at any other period of the attack.

The diseases included in the enthetic (*ἐνθετος*, put in, implanted) order have the common property of becoming developed in the body after the introduction of specific poisons by inoculation or implantation, whence the name of this order is derived. The sources of these poisons can be more readily traced than those which produce miasmatic diseases. The morbid germs themselves may be carried into the system through thin or abraded cutaneous surfaces, or through mucous membranes by absorption, without the actual existence, so far as can be ascertained, of any solution of continuity; or they may be introduced by poisoned instruments, as in dissection-wound, or by the teeth-fangs, &c., of an animal, by which the wound or abrasion is inflicted simultaneously with the introduction of the poison. In every case the specific germs are first implanted into the system by absorption, and subsequently become developed in virulence and intensity by a zymotic, fermentative process, until the characteristic symptoms and effects of their presence are produced. To this order belong the following affections:—Hydrophobia, glanders, malignant pustule (an able description of which has recently been written by Dr. William Budd), dissection-wound, leprosy, syphilis, and gonorrhœa.

The next order of zymotic diseases is the dietetic, which

comprises all the affections which are dependent upon deficiencies or errors in diet, viz., scurvy, purpura, rickets, bronchocele, cretinism, lead palsy, delirium tremens, ergotism, and paralysis of the lower limbs produced by the use of the *Lathyrus sativus*, a species of vetch, as an article of food; the last-named disease has been chiefly observed in India, but other species of this plant, the *Lathyrus cicera*, for instance, have been known to produce this peculiar affection in Europe; cases of it are recorded in Taylor's work on Poisons, and by M. Vilmorin, in the "Annales d'Hygiène," for 1847.

We may here briefly remark that the diseases in the zymotic class are more or less preventible, and that it is even possible so completely to extinguish some of these affections as to convert them into rare pathological curiosities. The dietetic order furnishes some striking illustrations of this fact. Take, for example, the first upon the list of the diseases which compose this order, viz., scurvy, which is brought about by a deficient supply of the organic vegetable acids, and of the salts which exist in fresh vegetables; this disease has almost entirely disappeared from naval hospitals and ships of war, owing to the introduction of a daily allowance of lemon juice into the dietary scale, which has also been further improved both in quantity and quality by various other additions and alterations. In 1780, the number of cases of scurvy received into Haslar Hospital was 1,457; in 1806, one only; and in 1807, also one. The affection still exists, however, to a fearful extent amongst our mercantile marine, and that of other countries, as is well known to practitioners resident in sea-port towns, and is also evidenced by the large number of cases of scurvy admitted annually from the crews of merchant-vessels into the Seamen's Hospital Ship, lying in the Thames, off Greenwich. When it is considered that the almost total extinction of this fearful scourge has been procured in our national navy by the adoption of simple measures, the conviction must force itself upon the mind of every one, that stringent legislative measures ought to be framed for the purpose of protecting our merchant-seamen from the evils which they suffer, through the apathy and miserable parsimony of those shipowners who send their vessels to sea unprovided with lemon-juice, which, when it is carried is, we fear, too often looked upon only as a medicine to be administered after scurvy has shown itself, and not in the true light of a prophylactic agent, which ought to be used frequently, or even daily, during long voyages.

In the parasitic order of diseases are brought together all the morbid conditions which are due to the presence of animal

or vegetable parasites, either within, or upon the surface of, the body. From the animal kingdom we have entozoa and epizoa, found respectively within, or external to, the body; from the vegetable kingdom, entophytes and epiphytes, occupying the same relative position as the two classes of animal parasites. Until a recent period, the knowledge of parasitic diseases was very limited and imperfect, and even now much remains to be learnt regarding the manner of reproduction, development, and propagation of the parasites on whose existence they depend. We believe that, as our acquaintance with this subject becomes improved, it will be found that many obscure forms of nervous and other affections are really due to the presence of entozoa. The author gives, at considerable length, an account of the Guinea-Worm, *Filaria Medinensis*, which is unknown in England, excepting in rare instances, where the persons affected by this parasite have recently returned from one of the countries in which it is endemic. Like most modern writers, Dr. Aitken believes that the *Filaria Medinensis* obtains entrance into the body through the skin.

The epizoa, animals living upon the skin and hair, and the parasites of vegetable origin, are described very minutely and accurately, together with their appropriate treatment. With the vegetable parasitic diseases Dr. Aitken includes a peculiar and interesting affection to which attention has lately been called by Dr. Carter, of the Bombay Medical College. It is known by the name of the Fungus Foot of India (or *Chionyphe Carteri*), and is "due to the presence of a mucedinous fungus, which eats its way into the bones of the tarsus, metatarsus, and lower ends of the tibia and fibula;" the patient ultimately dies from exhaustion. This disease prevails in many parts of India and the north-east shores of the Persian Gulf, and has hitherto been observed in the natives only.

Constitutional diseases may be divided into:—1. Diathetic affections; and 2. Tubercular, phthisical, or wasting diseases. The diseases comprised in the first class are those which occur in persons in whom there exists a peculiar constitutional predisposition to their attacks. Rheumatism and gout are good representatives of this class, but the subjoined list of affections, included by Dr. Aitken under the heading of diathetic diseases will show that he has introduced some marked nosological innovations here, as well as in some other parts of his work:—Rheumatism; gout; anæmia; chlorosis; leucocythæmia; supra-renal melasma (*morbis Addisonii*); beri-beri (an affection peculiar to Ceylon, characterised by great debility, and terminating in general oedema, serous

effusions, and death); chronic Bright's disease; diabetes mellitus; spasmodic asthma; and cancer.

The doctrine that Bright's disease is not essentially a local affection of the kidney, but actually and primarily a blood disease, was advanced fifteen years since by Dr. Walshe in a clinical lecture, afterwards published, and although his views, nearly similar to those enunciated by Rokitsky a few years before, were combated by various writers, the more recent observations made by Simon, Parkes, Pavy, Johnson, Basham, and others, tend to establish the fact, that diabetes is a constitutional and not a local disease. The evidence collected by Dr. Aitken in support of this view is such as cannot be well disproved, and the whole chapter upon diabetes furnishes an excellent epitome of the numerous contributions which have been made to the correct pathology of that disease.

In the treatment of asthma, which the author agrees with Dr. Salter in considering as due to spasmodic contraction of the bronchial tubes, connected with reflex action, he places more reliance upon properly regulated dietetic regimen than upon any other method of treatment.

Whether cancer may be looked upon as, strictly speaking, a constitutional disease is open to question, although a mass of evidence has, at various times, been brought forward in favour of this hypothesis.

The tuberculous class of constitutional diseases chiefly comprises phthisis pulmonalis, scrofula, tabes mesenterica, and tubercular meningitis, which are characterised by the deposition of tubercle in certain organs for which this morbid product has a special predilection.

The subsequent chapters upon local diseases occurring in the brain, spinal cord, heart, lungs, liver, and other organs, are all clearly written descriptions of the affections of these viscera. We must, however, pass over them, and resume our comments at Part IV, which treats of the hitherto neglected but important and interesting subject of medical geography, or, in other words, the geographical distribution of health and disease over the globe.

The influence of climate is very considerable as regards the production or modification of disease, and especially of those forms which are of a zymotic type, and require a certain range of temperature, with concurrent physical conditions, such as moisture, &c., for their complete development. The geographical distribution into zones, of such affections as cholera, remittent and yellow fever, appears to be regulated, to a great extent, by the relative degrees of temperature and moisture which exists in the various localities where

they are most prevalent. The isothermal zones which may be marked out on the map, connecting different places which have the same mean temperature, as was first pointed out by Humboldt, are closely related to the geographical distribution of diseases. Taking a general view of these zones or realms of disease, we may consider them as indicated by the regions respectively comprised in the zones commonly known by the names of tropical, temperate, and polar. They are well delineated in a map, reduced in scale from a similar one in Mr. Keith Johnston's "Physical Atlas;" and the author gives an explanation of this chart, briefly pointing out the character of the diseases most prevalent in each zone. The subjects of malaria and acclimation also receive a fair share of attention.

We must now bring our observations to a close, although we have scarcely noticed one-half of the parts which we had marked as of special interest. If there be any fault in this work, it is the apparently careless manner in which proper names have been rendered. Thus, Dr. Hassel is made to do duty for Dr. Hassall, and Dr. G. Johnston is put for Dr. G. Johnson; while Dr. Thudichum is repeatedly spoken of as Dr. Thudicum, and the late Mr. Quekett's name is invariably mis-spelt Queckett; again, the discoverer of vaccination is said to have practised at Beakely, which should of course have been written Berkeley, in Gloucestershire. These are errors, however, which can be readily corrected in future editions.

The necessity for a work which supplies not only sound but *recent* information upon the practice of medicine has long been felt by practitioners and students, and Dr. Aitken has produced exactly the kind of guide that has been wanted, in a manner which does infinite credit to his spirit of laborious research and to his great abilities. His "Science and Practice of Medicine" must at once assume the first place amongst the text-books on the subject of which it treats, and will undoubtedly continue to hold a prominent position for many years to come.

THE NEW PHARMACOPŒIA.—This work, with its numerous alterations and imperfections, continues to create adverse criticisms, of which not the least severe is that of Professor Redwood, in his lectures at the Pharmaceutical Society's Rooms. Explanatory and analytical works upon the Pharmacopœia are announced by several writers, amongst whom are Dr. Nevins, Mr. Haselden, and Dr. Meadows. The manual by the last-named author will possess the advantage of including many preparations (described in distinctive type), which are of acknowledged value, but are not given in the new Pharmacopœia. The new edition of Dr. Garrod's "Materia Medica" will be published in April.

OPHTHALMIC LITERATURE.

1. *The Manual of Ophthalmoscopic Surgery: a Practical Treatise on the Use of the Ophthalmoscope in Diseases of the Eye.* By JABEZ HOGG, F.L.S., Senior Assistant-Surgeon to the Royal Westminster Ophthalmic Hospital, &c. Third Edition, Pp. 296, 8vo., with Illustrations. London, Churchill and Son. 1863.
2. *Traité des Tumeurs de l'Orbite.* By M. DEMARQUAY, Chirurgien de la Maison Municipale de Santé, du Conseil d'Etat, &c. Pp. 584, 8vo. Paris, Victor Masson, 1860.
3. *On the Arcus Senilis, or Fatty Degeneration of the Cornea.* By EDWIN CANTON, F.R.C.S., President of the Medical Society of London, Surgeon to, and Lecturer on Surgical Anatomy at, the Charing Cross Hospital, &c. Pp. 228, 8vo., with numerous Illustrations. London, Hardwicke, 1863.

IN the present age of specialties, in which no diseases and no important organs of the body, have escaped the assiduous attention of one or more authors, there is no special branch which has surpassed, in progress, that of Ophthalmic Surgery.

This advancement is due, in no small degree, to the discovery and perfection of one of the most useful instruments introduced into modern practice, viz., the ophthalmoscope. By the aid of this instrument, the deep-seated structures of the eye can be examined with the utmost minuteness, so that the practitioner is enabled not only to successfully diagnose forms of ocular disease, the symptoms of which, previously to the discovery of the ophthalmoscope, were of a very obscure character, but also to detect any incipient deviations from a healthy condition of the eye, and thus to put into force the old axiom, "*Venienti succurrite morbo.*"

The fact that a mirror-like reflection could be obtained from the eyes of various animals when a ray of light was allowed to fall upon the eye at a certain angle, especially in a partially darkened room, was known long since, and attracted considerable attention. The importance of this fact was, however, not fully recognized until 1846, when our countryman, Mr. Cumming, in a paper, "*On the Luminous Appearance of the Human Eye,*" (*vide* vol. xxix of the "*Medico-Chirurgical Transactions,*") pointed out how it might be beneficially taken advantage of in the examination of the interior of that organ. He proposed to effect this by placing the patient in a darkened room, in such a position

that a ray of solar light, admitted through an aperture in the closed shutters, should fall at an oblique angle upon the front of the patient's eye. In the following year, M. Brücke, Professor of Physiology in the University of Vienna, and M. Helmholtz, having read Mr. Cumming's paper, instituted further investigations into the phenomena described by that writer, and, eventually, in 1851, by the adoption of a mirror, and the use of reflected, instead of transmitted light, succeeded in devising an instrument from which, although very imperfect, the present efficient ophthalmoscopes are derived.

It would occupy too much space to enter here upon even a list of the numerous improvements and modifications which the ophthalmoscope has undergone during the brief interval of some twelve years since its introduction; but all who are interested in this matter, will find a complete history of the instrument in the third edition of Mr. Hogg's book, now lying before us. The term "edition," conveys only an imperfect idea of the character of the valuable "Manual of Ophthalmoscopic Surgery," which, having been entirely rewritten and considerably enlarged, may be looked upon as a new work, when compared with the first edition, which appeared in 1857, and which was mainly based on a paper read before the Medical Society of London.

Still, notwithstanding the immense advances which have been made towards obtaining a perfect ophthalmoscope, it remains unused and uncomprehended by the great bulk of the members of the medical profession. This is the more to be regretted when we take into consideration the advantages derivable both to the medical man and to his patients from the employment of an instrument which would frequently afford an immediate solution of many obscure cases, which might otherwise, without a resort to the use of the ophthalmoscope, have baffled the skill of the practitioner, and have finally terminated in the loss of the patient's sight. On this point, Mr. Hogg's testimony is valuable as well as instructive:—

It (the ophthalmoscope) promises a vast diminution in the number of those cases where extinction of the sight, the most valuable and cheering of the senses, so often results from ignorance of the nature of the attack, or of the real seat of the disease. I may truly say that the most painful experience of a surgeon to a public institution for eye disease, arises from the circumstances of his position informing him that many of the totally blind that come under his observation might have escaped so great a misfortune, had circumstances been earlier favourable for exploring the otherwise dark chamber of the eye, and reading off, as it were, a correct diagnosis, whilst opportunity was afforded for proper measures of relief to have been adopted.—*Preface*, p. vii.

It has been urged by some, more ready to succumb to imaginary difficulties than to strive to overcome slight obstacles, that the knowledge of the ophthalmoscope is difficult to attain, and requires much and continuous practice, so that it is only adapted for the use of hospital surgeons and specialists. How far this assumption is founded upon fact may be gathered from a perusal of the earlier chapters in Mr. Hogg's work; and we feel that we may safely assert that any one who has seen the ophthalmoscope employed occasionally by a skilful manipulator, and who has thus obtained an insight into the proper method of placing the patient, &c., can, with such a handbook as Mr. Hogg's for his guidance, soon acquire sufficient dexterity, even in a limited sphere of action, to enable him to "read off," as it were, the condition of many of the structures which enter into the composition of the eyeball.*

Some considerable period will probably elapse before the practical advantages of the ophthalmoscope are widely disseminated throughout the profession, but we have no doubt, in our own mind, that the time will arrive when its value will be properly recognized and its use generally adopted. A man need not be very old to recollect the numerous objections which were made against that useful little instrument, the stethoscope. Whether arising from the tenacity with which men cling to old habits, from the unwillingness which most persons who have reached a certain age show to being taught new-fangled notions, as they term all innovations, from mistaken ideas respecting the cost, and the trouble requisite in learning the use, of new instruments designed to aid in the diagnosis of disease, or from suspicions as to the sincerity and disinterestedness of their inventors, the result is invariably the same, viz., to postpone their general employment for an indefinite space of time. Of these impediments, expense is one which is most commonly thrown in the way of learners, who, thinking that the more elaborate the instrument the more easy will be their mastery of it, or, yielding to the human weakness for display, often purchase high-priced instruments, which are very liable, from the number and complexity of their fittings, to get out of order in the hands of an inexperienced person, and thus to engender dislike and apathy on the part of the beginner. The rule cannot be too strongly impressed upon learners, and especially upon

* The beginner in ophthalmoscopic studies will find some very useful information in a pamphlet, published by Churchill and Sons, and entitled "Illustrations of the Use of the Ophthalmoscope," by William Martin, F.R.C.S., late Professor of Ophthalmic Surgery, Calcutta Medical College.

those who depend mainly upon self-instruction, that it is best to commence with the simplest and plainest, so long as it is a correct, form of the instrument which they desire to study; and this rule holds good not only with respect to the ophthalmoscope but also as regards the microscope, laryngoscope, and other mechanical aids to diagnosis. How often, for instance, may we not observe, carefully kept under a glass shade, a valuable microscope, which has not been used for months, perhaps for years, merely because the owner, having misunderstood its management, or lost some essential part of the instrument, not necessary in those of simpler construction, has put it by in despair, after repeated attempts to work with it. Had he at first procured a cheap and plain apparatus, he would, if it were accidentally injured, not have been deterred, by previous expenses, from purchasing another, whilst when he had reached proficiency in microscopic manipulation, the pleasure of obtaining one of the more costly and elaborate microscopes, would have been greatly enhanced by his practical knowledge of its real value. The same holds good with respect to the ophthalmoscope, and we therefore entirely agree with Mr. Hogg in his recommendation of plain ophthalmoscopes to beginners, whatever they may resolve upon procuring subsequently.

We have dwelt at considerable length upon the various objections which are made to the ophthalmoscope, in common with other valuable diagnostic aids, because we believe that a correct diagnosis of a disease, particularly in its earlier stages, is certainly no less important than the treatment; in fact, without the former, the latter must often be altogether wrong; and even those who raise objections to the use of the different diagnostic helps referred to, must acknowledge that the trouble and expense incurred through them must be more than compensated for by the extent to which treatment will be simplified, in proportion as the means of diagnosis are made more perfect and complete.

In the use of the ophthalmoscope, it is most essential that the observer should have a thorough acquaintance with the appearance of the various parts of the eye, in a healthy as well as in a diseased state, so that he may comprehend the exact extent of the morbid alterations. Some good hints respecting this point may be found in the fourth chapter of the "Manual of Ophthalmoscopic Surgery," pp. 89—115.

One of the affections for the simplification of which much has been done by the ophthalmoscope, is cataract, which, with the aid of this instrument may be detected in its incipient stages, long before it is evident to the unassisted eye, and at a time when some hopes may be entertained of

its arrest by suitable treatment. The different forms of retinitis may be correctly diagnosed by means of the ophthalmoscope, and it has also rendered unnecessary the vague term of amaurosis (in which disease, as Walther, referring to former difficulties of diagnosis, has observed, "the patient and the physician were both blind"), by showing the dependence of the so-called amaurotic condition on causes which, though entirely distinct, could not be perceived without an ophthalmoscopic examination. A due share of space is given to these affections in Mr. Hogg's book, but not to the exclusion of the other morbid states of the eye, in which the ophthalmoscope may be employed with advantage, and which are fully, and we ought also to add ably, discussed by Mr. Hogg.

In the treatment of ophthalmic diseases, the author's views are in accordance with those of most modern writers, the preference being given in most cases to tonics and nutrient food over lowering and depleting treatment.

Glaucoma is regarded by the author as due to inflammation of the *tensor choroideæ*, and, like his colleagues, Mr. Hancock and Mr. Power (*vide* "Medical Mirror," No. 2, p. 83), he considers that section of the ciliary muscle is the best and safest mode of treatment, and that this operation should be always preferred to the more hazardous one of iridectomy.

We have already stated that the knowledge of the ophthalmoscope only extends over the past few years, and we cannot give a more evident proof of this fact, than the circumstance that the instrument is scarcely referred to in M. Demarquay's excellent treatise on "Tumours of the Orbit," published three or four years since. As no notice of this valuable contribution to ophthalmic literature has ever, so far as we are aware, appeared in any British medical periodical, we shall give a short analysis of it.

After some preliminary observations, which are devoted to a general description of the anatomy of the orbit, the physical peculiarities which favour the existence of certain morbid conditions in different parts of the cavity being particularly pointed out, M. Demarquay proceeds to the subject of tumours in this region, which are arranged under two heads: 1. Tumours which, though originally external to the orbit, may, sooner or later, encroach upon that cavity, and then give rise to the same train of symptoms as tumours primarily contained within the orbit; and 2. Tumours commencing within the orbit itself.

Those belonging to the first class may proceed either from the cranial cavity, from the eyelids, from the nasal canal or fossæ, from the maxillary or frontal sinuses, or from more

remote parts; with these may be included abscess, hypertrophy, exostosis, osteosarcoma, and cystic growths, commencing in the orbital walls.

The causes of hypertrophy, exostosis, and periosteal tumours in this situation are uncertain, but it is probable that, in some instances at least, they are due to syphilitic taint. In fact, the history of several cases, which are detailed by the author, support this view, which is still further carried out by the circumstance that the patients derived more benefit from the administration of antisymphilitic remedies than from any other plan of treatment. Occasionally, these bony tumours attain to a very considerable size. Schott (*vide* Chelius's Surgery) has reported a case of exostosis occurring in a young man of 20 years of age, in whom the globe of the eye was completely pushed out of its socket by a bony growth which occupied five-sixths of the orbital cavity. In the museum of the London College of Surgeons a skull is preserved, in which the two orbits are entirely filled by osseous growths, which have also invaded the nasal fossæ and the maxillary sinuses. Each of these tumours projects more than an inch beyond the cheek bones; the unfortunate patient, whose case was published by Mr. Howship in his "Practical Observations on Surgery," London, 1816, lost both eyes in succession, after most excruciating suffering. The length of time occupied by the development of tumours of this kind is, like their origin, very uncertain; as a rule, they are probably of considerable duration, and in one case, narrated by M. Demarquay, a period of thirty-two years elapsed between the first appearance of symptoms of pressure within the orbit and the expulsion of the eyeball from this cavity.

One of the most frequent varieties of tumour in the orbit arises from inflammation of the cellulo-adipose tissue which exists in this cavity. The principal causes to which it is due are the presence of some foreign body within the orbit, injuries from gun-shot wounds, or cutting instruments (sometimes it results from the injury necessarily inflicted in the course of operations on the eye), the effects of cold, and the extension of erysipelas, or of simple inflammation from the face and adjacent parts. The author enters very fully into the diagnosis, prognosis, and treatment of this affection; but our space will not admit of our making any remarks upon this point, further than in observing that he strongly insists upon the advantages to be derived from prompt and decided antiphlogistic treatment in most cases.

Abscess in the orbit, more frequently dependant upon the inflammatory condition just described than upon any other cause,

may give rise to an intra-orbital tumour; the natural result of the accumulation of pus within the orbit will, of course, be protrusion of the eyeball, known as exophthalmia.

This peculiar affection, which consists in the increase in volume of the orbital cellular tissue, or of the eyeball itself, and consequent protrusion of the eyeball, may be produced by various causes. M. Demarquay classifies these causes, some of which are more or less remote, under four heads:—1. All of the causes which are productive of serous infiltration, whether local or general, such as cold, and anasarca, connected with scarlet fever, or Bright's disease of the kidney; 2. Those which give rise to congestion at the side of the head, cerebral congestion, goitre, and functional or organic affections of the heart; 3. The scrofulous, lymphatic, chlorotic, or endemic diathesis, and convalescence after severe disorders of long duration, such as typhoid fever; 4. All of the maladies which are characterised by paroxysmal and violent muscular efforts, frequently repeated, as, for instance, asthma, whooping-cough, and hysteria. Several of these predisposing or exciting causes may be conjoined in the same individual. Thus, in the form which has been frequently described of late years, under the name of Exophthalmic Goitre, or Thyroid Exophthalmia, there is not only vascular congestion through the pressure of the enlarged thyroid gland upon the important blood-vessels of the neck, but there is also, in many instances, functional or organic disease of the heart, and anæmia, producing serous infiltration of the cellular tissue contained within the orbit.

The treatment of exophthalmia will vary considerably according to the circumstances which have given rise to it. The first indication will be to combat, by appropriate remedies, the general causes—tonics, especially the preparations of iron, being useful in the majority of cases. With respect to the local treatment, Mackenzie, Taylor, and some other eminent oculists, limit it at first, and often entirely, to the employment of douches of cold water to the eye. When the disease is connected with serous infiltration, the application of a blister to the circumference of the orbit may be found serviceable. Moderate pressure upon the globe of the eye by means of soft lint kept in position by a bandage, as in the treatment adopted after the operation for cataract, has been resorted to with success by Dupuytren and Dumours, and the author speaks very favourably of this simple plan of treatment. He protests against the local irritation by electricity, tincture of iodine, &c., suggested by different writers.

M. Demarquay relates numerous cases of tumours formed

in the orbit, in consequence of the accidental introduction of foreign bodies, such as shot, fragments of glass, and splinters of wood, into that cavity. It is, of course, of great importance that the foreign substance should be removed as soon as possible, but care must be taken not to injure the eye more than is absolutely requisite; and it would even be better, in some instances, to wait for a short time, simply subjecting the patient to antiphlogistic treatment and regimen, and carefully watching the symptoms, than to proceed immediately to an operation for the extraction of the substance impacted in the orbit.

Passing over the chapters which contain a description of lipoma, enchondroma, and sanguineous tumours in the orbit, which may be divided into extravasated, aneurismal (those from true aneurism being extremely rare), erectile, and varicose tumours, and to which the author devotes a considerable portion of his treatise, we may resume our remarks at the section upon encysted tumours, which are incontestably more frequently observed than the other varieties of tumours, although they are themselves far from common.

Encysted tumours may commence either within the orbit, or in the eyelids, whence they find their way into the orbit, the latter being more numerous than the other species. As regards the former, the intra-orbital cysts, properly so called, the cellular tissue is the structure from which they usually spring. Encysted tumours are more frequently found at the upper and lower parts than at the sides of the orbit. They differ in size from that of a pea to that of a hen's egg; a case is recorded in the "*Annales d'Oculistique*" for 1858, in which an encysted tumour, in this situation, attained the dimensions of a large orange. They are usually oval or rounded, but their shape may vary according to the position in which they are placed, and the nature of the surrounding structures. They are more often unilocular than multilocular; and they not unfrequently accompany other morbid conditions of the eye, such as cancer, &c. In proportion to the size which they reach, and the position which they occupy, intra-orbital cysts may cause atrophy of the lachrymal gland, flattening and disorganization of the optic nerve, alteration in the shape of the eyeball, and absorption or even perforation of the walls of the orbit.

According to their contents they may be divided into three classes:—1. Serous cysts, properly so-called; 2. Hydatid cysts; and 3. Soft atheromatous, or steatomatous, tumours, enclosed within a cyst. Those belonging to the first class are by far the most numerous, and they usually attain the greatest degree of development.

Fibrous tumours of the orbit present a close analogy to encysted tumours, both in their course and the symptoms to which they give rise. The main points of distinction between the two varieties consist in their manner of origin, the latter being usually attached to the periosteum, of which they appear to be simply an expansion, whilst encysted tumours have only a very slight connection with that membrane; in their structure, the fibrous tumours being of much firmer consistence than the others; in the absence of an internal cavity in fibrous, whilst there is one present in cystic, tumours; and in their course, as the tumours belonging to the former class grow more slowly than the latter, besides which they seldom become of so large a size, and are less elastic to the touch.

Cancerous tumours may extend from neighbouring parts to the orbit, or they may commence within that cavity. Like the same affection in other organs of the body, cancer of the orbit may be either primary or secondary. Each of the three principal forms of cancer,—schirrhous, encephaloma, and melanosis,—is occasionally met with in the orbit, the second-named being the most often observed, in contra-distinction to the eyeball, in which melanosis is the most frequent. If the disease be satisfactorily diagnosed, ablation of the tumour is the only means of remedying the morbid condition; and if it has not extended to the eyeball, and the sight has not been lost, or the eyeball much injured, the operator should endeavour to remove the tumour, if it should be possible, without injury to the eye itself.

M. Demarquay gives a concise account of neuroma, and other tumours situate in or upon the optic nerve, and also of the affections which lead to the development of tumours in connection with the lachrymal gland.

The work is concluded by a complete *resumé* of the various points discussed throughout the volume, and an appendix, containing a list of the principal authors whose works have been consulted, bears evidence to the industrious and zealous manner in which M. Demarquay has studied the subject on which he has so ably written.

We have seldom taken into our hands a book which, whether from the accuracy of the descriptions, the pathological importance of the subject under consideration, or the ability and depth of research evidenced by the author, is so well calculated to excite the interest of the reader, and to sustain it throughout the perusal of the work, as Mr. Canton's recent monograph upon the arcus senilis.

The remarkable appearance which the cornea presents in old people, and not unfrequently in younger individuals whose health has been impaired by various debilitating causes, such

as severe and frequent illness, privation, great mental anxiety, and habitual intemperance, has been long known to anatomists under the names of *arcus senilis*, *gerontoxon*, &c.; but its pathological importance failed to be recognised, until the publication of Mr. Canton's observations, in the medical journals some few years since. This phenomenon was simply looked upon as a sign of advancing age, and its presence was not connected, in the mind of the medical observer, with any special morbid alterations in the body. Mr. Canton has shown, however, that it seldom, if ever, occurs without its being accompanied, to a greater or less extent, by fatty deposition in various organs, especially in the heart. This fact is of the utmost value; indeed, as has been very justly observed by Mr. Paget, "the *arcus senilis* seems to be, on the whole, the best indication which has yet been found of proneness to an extensive or general fatty degeneration of the tissues."

Generally speaking, the commencement of the formation of the *arcus senilis* is about the fiftieth year of life, after which period it gradually increases both in opacity and in extent. Mr. Canton states, that its appearance bears no relation, as is often supposed, to the degree of stoutness or leanness of the individual who is affected with it. It may, however, be sometimes noticed at an earlier period than that just mentioned; and he has known cases in which the early occurrence of the *arcus* was hereditary, but he doubts whether this condition is ever seen as a congenital peculiarity, as has been stated by some writers, who, he is disposed to think, have mistaken a remnant of the original corneal opacity, simply showing an arrest of development, for the *arcus senilis*.

The gradual formation of the *arcus* is unaccompanied by pain or other marked symptoms, and the eyesight is not usually much impaired by it. As a rule, both eyes are symmetrically affected, and when the *arcus* is found in one eye only, it is most probably due to some inflammatory disease, or injury, which has been limited to the eye in which the *arcus* is present.

At the outset, fatty degeneration of the margin of the cornea, which constitutes the true *arcus senilis*, is evidenced by a slight diminution of the translucency of that membrane, assuming by degrees a semilunar shape. The *arcus* which is formed first, generally occupies the upper segment of the cornea, but as the lower *arcus* increases, two distinct arches, an upper and an inferior, situated close to the line of junction of the cornea and sclerotica, are apparent in each eye. As their development proceeds, the extremities of the two arches

become prolonged, and they finally meet and coalesce, so as to inclose an elliptical or circular space of cornea. It will thus be seen, that fatty degeneration begins as two curves, or arches, and that these subsequently meet, so as to form an ellipse, or zone, to which the name of *circulus senilis* is more particularly applicable.

If closely examined, the arcus will be found, as has been pointed out by Mr. Canton, to consist of two separate portions, the outer being of a greyish-white or dusky hue, the inner of a milky colour; between these there exists a clear, healthy line of cornea, through which the iris can be plainly seen. This yet unaffected, circumcorneal ring is rather below the level of the opaque structures which bound it, as the conjunctiva suddenly ceases, on the one hand, while, on the other, the fatty deposit has produced elevation of the cornea.

When the arcus occurs in comparatively early life, owing to premature decay, a series of corresponding changes take place in various parts of the body. Of these symmetrical changes—

“The coloration of the crystalline lenses, the grey hairs on the temples, fatty degeneration and ossification of the laryngeal and costal cartilages, interstitial absorption of the necks of the thigh-bones, atheroma and calcification of the arteries,” &c.,

furnish decided examples.

Besides the corneal arcus senilis, other peculiarities which are found in the eyes of old people, upon dissection, are worthy of enumeration. The globe is sunken and diminished in size; the cornea, which is denser than it originally was, has its convexity lessened, and the eye becomes presbyopic; there is a loss of transparency of the cornea, with diminution in the quantity of the aqueous humour. The sclerotic becomes whiter and more dense; the colour of the iris is less defined, its sensibility to the impression of light is diminished, and the pupil is, consequently, somewhat dilated. Choroidal loss of colour is also observable; the retina is greatly thinned, but this change is compensated for by increased firmness; the crystalline lens becomes smaller, flatter, and more dense and tough, especially at its centre, and it loses its clear, transparent appearance, and assumes a yellowish colour. The ophthalmic arteries and their branches are very commonly found to present atheromatous patches, when the arcus senilis is well marked in elderly persons; an analogous condition also exists in other parts of the body, as in the coronary arteries and the heart, for example. There is also fatty degeneration of the muscles of the eyeball, when the arcus is completely formed.

The appearances exhibited upon microscopic examination of the cornea, in arcus senilis, are described with careful minuteness by Mr. Canton; but, as it would be impossible for us to do justice to this point without pictorial assistance, such as is to be found in his book, we must refer the reader to the work itself for information upon this point, simply contenting ourselves with the remark that, upon examination with a microscopic power of 200 diameters, the arcus is found to be constituted by myriads of fine oil-globules, together with many larger ones, which have probably been formed by the coalescence of several small globules.

We have already adverted to the fact that consanguinity exercises some influence over the tendency to the arcus senilis. An interesting and instructive proof of this will be found in the second chapter of Mr. Canton's work, where he gives an account of a family of five persons. The father and the mother, aged 66 and 53 respectively, who had been subjected to much trouble and privation for many years, had, each of them, a very strongly marked circulus senilis in both eyes. The effects of hereditariness were evident in their children: the eldest son, 25 years old, had had an arcus in the upper and lower segments of the cornea since the age of sixteen, when he first came under Mr. Canton's notice; the second son, a well-grown and healthy-looking young man of 20 years of age, had a distinct arcus in each eye; and upon examining the eyes of another son, aged 12, and apparently in good health, Mr. Canton discovered, both at the upper and lower part of the cornea, an arcus which was well-defined, although in a less degree than in either of his brothers. Other instances of the occurrence of the arcus at comparatively early age are also given.

When an arcus is formed in one eye only, thus presenting an exception to the rule of symmetrical arrangement which generally prevails, it is a result of local atrophy and degeneration, dependent upon some locally-acting cause, such as injury or inflammation of the affected eye, which has produced an impediment to the nutrition of the cornea, by the arrest of the free supply of blood to it. Analogous forms of fatty degeneration may occur in any parts of the body, from disease, injury, or disuse.

The deposition of fat globules may be succeeded after a time by the deposition of calcareous matter, which has a tendency to accumulate in organs whose vitality has been destroyed, or impaired, by insufficient nutrition. The earthy salts which are occasionally present in extremely marked cases of arcus senilis consist chiefly of the phosphate and carbonate of lime, and the phosphate of magnesia, generally

deposited in an irregular manner, but sometimes patches and even small plates of ossific tissue, are discoverable upon a dissection of the diseased cornea.

Although an arcus or circulus senilis is usually present in persons who have reached an advanced age, the reverse occasionally happens in those who have enjoyed sound health. These exceptional cases, of which Mr. Canton relates some very interesting examples, furnish powerful corroboration of the theory that the presence of the arcus is always a sign of either natural or premature bodily decay.

Various other alterations in structure occur in association with the arcus senilis, when it is completely formed. These structural changes are nowhere more remarkable than in the cartilages of the ribs and of the larynx, which are well known to become more or less ossified, as age creeps on—the period at which the alterations commence, and the rapidity of their progress being, in a great measure, dependent on certain general circumstances which influence the accession, and regulate the course, of these senile metamorphoses of tissue. Local causes may occasionally bring on these conditions, as, for instance, when phthisis laryngea produces ossification of the thyroid and cricoid cartilages, or when some of the costal cartilages undergo conversion into bone, at an early period of life, owing to their lying in the vicinity of diseased portions of the lung or pleura. In the progress of this affection of the cartilages, four distinct forms of degeneration, viz., the fibrous, the granular, the fatty, and the calcareous, present themselves in the order in which we have enumerated them; and so regularly does the deterioration of the cartilaginous tissue proceed that it is not uncommon, observes Mr. Canton, to have an opportunity of studying all of these forms of degeneration in a single specimen, and at the same time.

The costal cartilages are subject to ossific deposition at an earlier age in the male than in the female; and the cartilage of the first rib is usually ossified sooner than any of the others, while the cartilages of the false ribs are the last which become changed in their structure.

The ossification of the laryngeal cartilages may progress proportionately with the advance of years until what was originally a cartilaginous framework may be converted into a bony one. In this situation, again, as in the ribs, the calcareous deposition occurs comparatively later in life in the female than in the male. The order in which the alteration in structure generally occurs, is first in the thyroid, next in the cricoid, and lastly in the arytenoid cartilages. According to Mr. Canton, who differs from many writers on this point,

the epiglottis, a fibro-cartilaginous structure, commonly remains unaffected.

It is by no means unusual, as is stated in Mr. Canton's book, of the real scope and value of which the plain title "On the Arcus Senilis," conveys a very inadequate idea, touching, as it does, upon many important points connected with the pathology of diseases resulting from senile or premature decay, to find fatty degeneration of the heart co-existent with the degenerative changes in the cartilages of the ribs and larynx, and in the cornea. On the other hand, when no arcus senilis is present, all of the organs of the body are discovered, upon post-mortem examination, to be in a comparatively healthy state. It is, therefore, impossible to estimate too highly the importance of the arcus senilis as an aid to diagnosis and prognosis; and it is of special assistance to medical men connected with life assurance offices in enabling them to form an opinion of the probability of a long life, or the reverse, in the case of intending assurers. Many assurance companies have, in fact, recognized the valuable significance of the arcus senilis by the introduction of the following amongst the questions to be answered by the medical examiner:—"Is there any arcus senilis round the cornea? Is it slight, or well-marked?"

Few general circumstances exercise more influence upon the early development of the arcus than the mode of living, and, as there is a great tendency to fatty degeneration in persons of intemperate habits, it would naturally be inferred that they would be peculiarly liable to fatty degeneration of the cornea. Such is, indeed, the case, and Mr. Canton devotes a considerable space to the description of the arcus senilis in the intemperate, and in persons of the gouty diathesis. So marked, it may be observed, is the tendency to the formation of fatty matter in the bodies of drunkards, that even the blood itself presents striking characteristics of this morbid condition; Lecanu has recorded some cases in which the fat globules in the blood amounted to as much as 117 parts in 1000, although the proportion contained in healthy blood seldom exceeds 8 or 9 parts in 1000. In addition to this peculiar deviation from the normal state, the blood of persons who indulge to excess in alcoholic stimulants is found to be deficient in fibrine (so that its plasticity is diminished), and in red corpuscles, while the water and carbon are in excess of the healthy standard.

In this condition of things it is not surprising that the various organs materially suffer from organic changes. We cannot dwell upon the alterations which take place in the large viscera, the heart, lungs, liver, &c., and are thoroughly

described by Mr. Canton, as our notice has exceeded the limits which we had assigned to it, but we must not fail to mention the most important fact, that of these internal changes—

There is, generally, an outward sign manifested in the arcus or circulus senilis of the eye, which almost always indicates premature age brought on by the wear and tear of excessive mental anxiety, or by “fast living.”—Page 147.

To say that many free-livers, notwithstanding their apparently vigorous and hearty looks, are really unhealthy, and liable to suffer severely from even an ordinary attack of illness, may seem to be a paradox, but it is not the less true, as will be readily attested by all who have had opportunities for noticing the tardy convalescence, and not unfrequently serious termination, by which injuries, or disorders, of a commonly trifling character, are followed, when the subjects of them are men employed in breweries and distilleries, &c., and accustomed to drink excessive quantities of intoxicating liquids.

The morbid changes of structure, including the arcus senilis, which are observable in persons of gouty cachexia, are very similar to those which occur in people of intemperate habits. A complete account of them will be found in Mr. Canton's book.

It is highly satisfactory to know that in the incipient stages of fatty degeneration much benefit may be derived from a careful regimen, as regards diet, rest, or proper exercise, and from suitable medical treatment. What is more remarkable still is, that the arcus senilis, if only partially formed, may entirely disappear as the patient's health improves. Mr. Canton says that numerous cases of this kind have come under his observation.

A Practical Treatise on the Diseases and Infirmities of Advanced Life. By D. MACLACHLAN, M.D., F.R.C.P., late Physician to Chelsea Hospital. Pp. 718, 8vo. London, Churchill and Sons. 1864.

WE recognise at once the author's qualifications for the task he has undertaken, when we find that in addition to active military service, and extensive opportunities of seeing private practice, he held for very many years the important post of principal medical officer of Chelsea Hospital. Few can have had better opportunities therefore of observing this class of diseases in all their phases.

It seems that at home the subject has not attracted the attention which might have been expected. Valuable detached

essays have issued from the pens of Halford, Van Oven, Copland, and others; but until now no author has attempted to write at length upon it, unless it may be Dr. George Day, whose work, published in 1849, contains much important matter, although it is somewhat fragmentary. His book, however, is so good, that if he had continued to devote himself to the subject, and had enjoyed such special advantages for its elucidation as our author has had, we do not doubt but that his abilities would have enabled him to confer substantial advantages on our profession in this department of its literature. Abroad, some authors have investigated the subject more closely, and among the most successful of these have been Constatt and Durand Fardel.

In this dearth of literature on so important a subject we hail the appearance of a standard work by so competent an authority as Dr. Maclachlan. He begins by giving a *resumé* of the changes which must necessarily take place in the structure and functions of the healthy human body from the invasion of advancing years; and he next takes a preliminary view of the morbid conditions most prevalent in old age, and the general principles of their treatment. We think that his remarks, founded as they are upon an extensive experience, both in public and private practice, are eminently practical and judicious. The introductory chapter concludes with some observations on the phenomena displayed during ordinary decay of nature. In the succeeding chapters are systematically described the normal senile characters displayed by the nervous system, and by the organs of respiration, circulation, digestion, assimilation, and excretion. These are copiously illustrated by cases. The concluding chapters are devoted to a description of those diseases of the skin, which are peculiar to old age, and of constitutional or blood diseases.

In the introductory part, Dr. Maclachlan remarks upon the want of sensation which exists in old age, from which cause dangerous diseases often make considerable progress without the knowledge of the patient, and even of the medical attendant, unless the case is carefully watched. There is no pain or distress to warn us; and the disease, perhaps of an acute inflammatory nature, remains *isolated*, and excites no general sympathy in the system. The author instances acute diarrhoea, in which signs of inflammation have been found in the large intestine, the system remaining almost in its usual condition. For similar reasons, various maladies,—constitutional and local,—are often *latent*, giving rise to no signs whatever; and those of which we are cognizant, often make unperceived progress in a dangerous direction. Partly from this cause, narcotics are not so

needful, while they require in their use, caution, in proportion as the powers of life are feeble. Upon the debated questions of change of type in disease, and the propriety of depletion, the author expresses decided opinions, being evidently moderate, but firm, in his convictions. While admitting to a great extent the changes spoken of, he still considers depletion often applicable to cases of inflammation; and he states that even in the very old, venesection, but more often local depletion and counter-irritation have not unfrequently been found necessary, in his practice in Chelsea Hospital and elsewhere. Some very judicious directions are given as to the necessity, during general bleeding, of not trusting to the state of the radial pulse, but of constantly paying attention to the condition of the circulation in the heart and lungs. This precaution should never be omitted in the aged. The feeble vitality which exists should also make us doubly cautious during the administration, not only of narcotics, but of all medicines likely to have a depressing effect, viz., of mercurials, which can scarcely ever be requisite as alteratives; of antimony (James's powder, however, being often a safe and sometimes useful remedy), of the iodides, arsenic, and prussic acid; and of derivatives, whether internal or external. In a large proportion of cases, care should be taken to combine, with any of these medicines, permanent or temporarily diffusible stimulants. On the other hand, the author states from his experience, that chloroform is well borne by the aged, and often useful, as for instance, in the treatment of angina pectoris, and during the passage of biliary and renal calculi.

Amongst other changes in the senile constitution, Dr. Mac-lachlan notices atrophy of the organs, which he states to be almost universal, with the exception of the heart and arteries, and even including (and this is a fact of great practical importance) the prostate gland. Hitherto it seems to have been accepted as an axiom in surgery, that that gland in old age is constantly in a state of hypertrophy; but the author very justly says, that atrophy, not having been considered a probable disease, has not been looked for in post-mortem examinations, and consequently has eluded observation, whereas an enlarged gland has readily become apparent. Our own experience convinces us, however, that, in conjunction with the disposition in old age to inflammatory diseases of the bladder and urethra, it is not very uncommon for the prostate gland also to take on inflammatory action. At the same time, the author is enabled to state from his great experience, that stricture and enlarged prostate seldom co-exist. We are of opinion that the subject will bear further research, although

probably Dr. Maclachlan may be correct in his explanations and in his statement, that the normal senile change in this gland is, generally speaking, of the nature of atrophy.

The subject of climacteric disease is brought before us in a separate chapter, so as to show the ancient and modern opinions on the subject of climacteric periods, and is illustrated by many cases drawn from the experience of our author, and other observers. We, with him, are inclined to doubt whether it is often met with as a substantive disease. Too often have we had reason to look upon this condition as the external manifestation of some malignant malady, such as cancer or tubercle, fatty or granular degeneration, &c., long latent, and after many efforts of the system at elimination, becoming inextricably interwoven with the senile constitution. The apparent exciting cause may be a catarrh, a marriage late in life, disappointment, excessive fatigue, &c. We think that at certain periods of life there is a disposition to certain classes of disease; this disposition may, as age advances, exist in several parts of the body, and by the time the individual has arrived at from 60 to 70 years of age, there may be such an accumulation of morbid action, that the system may, indeed, be in a state of decay or threatening dissolution. We suspect that it is a condition affecting, almost solely, the wealthier classes; it is one, therefore, of plethora and congestion, and, as we learn from Dr. Maclachlan's work, is most successfully treated by total (although it may be temporary) change of habits and climate. It is satisfactory to find that, although perfect recoveries only rarely take place, the author has met with instances in his own practice. In the same chapter he also notices the extraordinary periodicity of invasion which may be observed in the aged in such complaints as headache, &c.

We next come to the diseases of the nervous system, which, like the rest, are preceded by careful descriptions of the senile anatomical characters of the parts which become affected. The author remarks upon the frequency of softening of the brain, which he considers to be, in one phase at least, almost peculiar to persons advanced in life; deaths from this cause being attributed commonly, as in the reports of the Registrar-General, to apoplexy, epilepsy, and paralysis. The same observation may be made, to a certain extent, regarding meningitis. It is remarked, that next to lung diseases, affections of the nervous system are the most fatal; while extreme infancy and extreme age are equally liable to their attacks.

When we come to diseases of the chest, we find noted the extreme rarity of whooping-cough, there having been

found, out of 61,151 deaths caused by it in England in the seven years 1848-54, only twenty-seven in persons above thirty-five years of age. Pneumonia and pleurisy will, at times (the author says) bear venesection, however old the patient may be. Phthisis pulmonalis is by no means so rare in old people as it is usually supposed to be; this common error arises doubtless from the circumstance that the usual organic complications are not present, or, at any rate, are not so well marked as they are in early life. The cause of the tardy appearance of the disease, in many cases, may be explained, according to the author, by the fact, that the constitutions of persons affected by a taint of struma, may, while they are in good position and able to live comfortably, show no predisposition to scrofulous or tubercular affections; but should poverty, in later life, induce defective nutrition, which is favourable to calcification of the tissues, then tubercle will be liable to become developed. It is astonishing how often phthisis of a latent type is found in the aged, causing but little impairment of the general health, cough, expectoration, or dyspnoea; in some cases, indeed, having been in existence possibly for many years.

As regards the author's description of the diseases of the digestive and excretory organs, his remarks on diet, and the treatment of the principal diseases among the aged, seem to us to be especially judicious. It appears that opium, and other sedatives, are borne better in this class of diseases than they are in affections of the head and chest, and that they are often both safe and efficacious. Dr. Maclachlan gives a practical caution that prussic acid is badly tolerated by the system in old persons, and that it should never be given excepting in very small doses, and after food. He appears seldom to have met with acute hepatitis, except as a result of tropical residence, but cirrhosis and granular degeneration are frequently observed, and are often latent. The same may be said with regard to albuminuria, and granular degeneration of the kidney, which is "far more frequent in persons advanced in life than is generally supposed." We think that the author's observations on the affections of the kidney are particularly valuable, and we would direct the attention of the reader to the caution given respecting the use of opium, and the treatment generally of senile gout and ischuria. The subject of diabetes in its various forms is, of course, discussed. By the way, the author's experience is against the presence of sugar in the natural urine of old people. From the cases which he adduces, it seems that even confirmed states of this disease may be cured without opium; if this drug be given at all, the form of Dover's powder possesses many advan-

tages. In the treatment of cases of retention of urine from paralysis, Dr. Maclachlan's experience is in favour of cantharides, in the form of the acetum cantharidis, applied around the umbilicus.

In the section on diseases of the skin the principal senile modifications are treated of, at length, and we think that the author's practical knowledge has enabled him to make some additions to our means of diagnosis of these disorders, as also to the modes of treatment. He is very successful in showing how intimately many cutaneous affections are connected with a general deterioration of the system, and consequently require as much general as local treatment. His account of the common and very distressing complaint *prurigo senilis*, will be found full of interest. He finds that it is often connected with gout. The last chapter of Dr. Maclachlan's work is devoted to the constitutional diseases, and although it contains no important discovery, the author's observations will be found eminently practical. *Erysipelas*, it seems, he has never met with in Chelsea Hospital, as propagated by contagion, and he thinks that old age may be the principal cause of this immunity. This is one of the diseases, in the treatment of which old age is no bar against venesection, in properly selected cases. Gout has often been met with in the hospital, although its inmates do not belong to the constitutionally predisposed, or the high-feeding classes. Rheumatic gout is looked upon as peculiarly a disease of advanced life.

Dry gangrene has been in many cases found to be connected with granular degeneration of the kidneys. It may, but not so often as has been supposed, be dependent upon diseased heart or ossification of the arteries. In cases in which the vessels have been found in this condition, the limb which was unaffected by gangrene presented ossification of the arteries to the same extent as the gangrenous limb; the reason for one limb being attacked alone by senile gangrene being that, in that limb, there is obstruction of the canal of the vessel. Therefore, although ossification of the arteries may have contributed as a predisposing, it has not been the exciting or producing cause. The author has found this disease very fatal, and has "never seen a recovery where both feet were affected." On the contested question of amputation in these cases we think that his remarks are very instructive.

We were aware that scurvy might be generated, and certainly aggravated by a rich diet not containing a due proportion of succulent vegetables, in conjunction with a hospital atmosphere, and broken constitution, especially in the aged; but we never met with a case more to the purpose

on this point than one related by the author, in which a cure was speedily effected by the simple addition of vegetables to an otherwise ample scale of diet.

The preceding summary will suffice to show the aims the author has had in view, and his method of treating the subject, which is one of the highest importance. As we have already hinted, Dr. Maclachlan's opportunities for gaining a thorough insight into the diseases of advanced life have been much more than ordinary, as for more than twenty years he had chief medical charge of an institution containing constantly above 500 persons, all of whom were advanced in years, while many were extremely aged. Of these, by far the largest proportion may be considered as invalids, and, in fact, from sixty to eighty were usually under treatment. The profession and the public are alike much indebted to the author—whose abilities are commensurate with his opportunities—for the manner in which he has given us the benefit of his extensive practical knowledge.

PAMPHLETS.

Excessive Infant-Mortality ; The Practice of Hiring Wet-Nurses ; The Comparative Properties of Human and Animal Milks. By M. A. BAINES. (Churchill.)—We feel much pleasure in finding a lady working so ably and zealously in a most important branch of hygiene. Excessive mortality amongst infants is one of the worst evils of the present day, and the sternest disciple of Malthus must shudder when he learns, that of the deaths in England in 1859, two in every five were of children under five years of age, and that 105,629 of these children had not accomplished even one year of their existence. With regard to the causes of this high death-rate, one of the chief is defective or improper feeding, which gives rise, as the authoress rightly observes, to convulsions (generally attributed to teething), defective assimilation, atrophy, mesenteric disease, rickets, and diarrhoea, besides many other scarcely less fatal affections. In order that the magnitude of the ill results of bad diet may be sufficiently understood, it must also be borne in mind that children who are improperly nourished are more likely to succumb to every form of disease, and especially to zymotic disorders, than those who are properly fed. The practice of employing wet-nurses is one which is fraught with danger to public health and public morals, and the evils of the system are forcibly demonstrated by Mrs. Baines. In every case where a wet nurse is employed the injury is two-fold, viz, to the child which is reared on the milk of a stranger, and to the child of the wet-nurse, who gives the sustenance, intended by nature for her own infant, to that of another person ; in fact, it has been shown that the children of wet-nurses form a very large proportion of those who die prematurely. Even supposing that the mother of an infant is unfortunately physically incapacitated from suckling her offspring, a wet-nurse is, at the best, a poor alternative, especially when we consider that, *faute de mieux*, wet-nurses are usually taken from the lowest classes of society ; and the authoress condemns the whole system of wet-nursing as bad. With

regard to artificial foods, *i. e.*, those which are made to supply the place of the natural mother's milk, Mrs. Baines gives the preference to farinaceous articles of diet, properly prepared, of course, over cows' milk. Her reasons are clearly laid down in the pamphlet "On the Comparative Properties of Human and Animal Milks." The best thanks of the community are due to the authoress of these pamphlets for her well-known, although unobtrusive, philanthropic exertions in various matters of vast social importance.

A Letter on Corpulence. By WILLIAM BANTING. Third Edition. 1864. (Harrison.)—This pamphlet is by a non-medical gentleman, who has experienced the horrors of obesity, which, from his own description, must have been productive of abundant annoyance and trouble for many years. On glancing at the title of the pamphlet, when we took it into our hands, we involuntarily smiled, as it called to our memory the humorous description in the "Spectator" of the hypochondriac who weighed himself after every meal, in order that he might so regulate his diet as to keep himself at one uniform weight, and the no less amusing "Comments on Corpulency and Lineaments of Leanness" of the late Mr. Wadd; but, after we had opened the pamphlet, and read some few passages, our feelings soon changed to those of sympathy, and interest in the author. The author, it appears, had no tendency to corpulency until between the thirtieth and fortieth year of his age, when he found that he began to get stouter, and being uneasy upon the subject, he consulted an eminent surgeon, who was also a personal friend, by whom he was recommended to resort to increased bodily exertion before the commencement of his ordinary daily duties. As rowing was especially suggested as a means of keeping down the superfluous deposit of fat, the author procured a good heavy boat, in which he took two hours exercise every morning. The only result of this was the gain of muscular vigour, and, simultaneously with it, an increased appetite, which caused the writer to eat more and, as a consequence, get fatter, so that this plan was ultimately abandoned. From this time, Mr. Banting's troubles may be fairly said to have begun, and, notwithstanding his application to various medical men for advice, the ailment still grew on him. As he quaintly says, "the evil still increased, and, like the parasite of barnacles on a ship, if it did not destroy the structure, it obstructed its fair, comfortable progress in the path of life." He became so much subject to the taunts and remarks of strangers, that he withdrew, in great measure, from society, continuing still his indefatigable endeavours to reduce himself to proper proportions. Low diet, riding on horseback, walking exercise, Turkish baths, and all methods which seemed to promise relief were tried, but with the same negative result, or, worse still, with positive increase of bulk. Some idea of the inconvenience which his obesity occasioned, may be formed from the fact, that he was unable to stoop to tie his shoe-string, or to do anything requiring change of posture, without much pain and difficulty; and that he was obliged to slowly descend stairs backwards, to save the shock to his ankle and knee joints from the weight of his body. Eventually, he happened to consult a surgeon on account of impaired hearing, and this gentleman who, although he did not perhaps address the author with the Shakespearian ejaculation, "Thou art monstrously fat!" evidently thought so, for he told him that his ailments were principally dependent on corpulence. Acting on this belief, his medical adviser directed him to abstain from bread, butter, milk, sugar, beer, and potatoes,—starchy and saccharine substances, and consequently fat-producers,—and placed him on a particular diet. The bill of fare to which he was restricted is too long for insertion, but it was certainly an agreeable one. The results of the treatment may be summed up in the statement, that on the 26th of August, 1862, Mr. Bant-

ing's weight (his height, it may be observed, was 5 ft. 5 in.) was 202 lbs., and that on the 12th of September, 1863, it was 156 lbs., making a diminution of 46 lbs., while his health is now better than it has been for twenty years past. The author's motives for publication arise solely from a desire to extend to others, afflicted as he once was, a similar relief to that which he has himself obtained ; and he states in his preface that it is his intention to give any profits, arising from the sale of the pamphlet, to some charitable institution.

The Laryngoscope. By G. D. GIBB, M.D. (Churchill.)—This is a paper which was read before the Medical Society of London by the author, whose name is a sufficient guarantee for the useful nature of its contents. Although the laryngoscope has only been known during the last few years, the progress which has been made in this country in its adaptation for medical purposes is very great, and we may fairly claim for those of our fellow-countrymen (amongst whom Dr. Gibb stands foremost), who have given their attention to this instrument, that they have arrived at a degree of perfection equal to that of continental observers, notwithstanding the interval which elapsed between the invention of the laryngoscope in Germany and its introduction to the notice of the profession here. The author details the particulars of many interesting cases of polypus, tumours, ulceration, and other affections of the larynx, all of which were successfully diagnosed by means of the laryngoscope, and, what is still more important, were successfully treated upon the discovery of the real cause of the disorder. Such cases, characterised as they were by loss of voice, irritable cough, and various similarly distressing symptoms, would, without laryngoscopic examination, which at once showed the nature of the affection, and its exact position in the larynx, probably have continued for many years without either relief or cure. The pamphlet concludes with an ably written and lucid account of the laryngoscope, and the manner in which it should be used ; and, as it is also illustrated throughout with numerous wood-cuts, it forms a very excellent guide to a knowledge of laryngoscopy.

On the Calabar Bean ; Its Action, Preparations and Use. By T. NUNNELEY, F.R.C.S. (Longman and Co.)—This is a reprint of a series of papers recently published in one of the medical journals, and gives a good epitome of all that is known of this new therapeutic agent. Its chief importance, at present, is due to the fact that when the extract of the Calabar bean (procured from Old Calabar, in Africa, whence its distinctive name) is introduced within the eyelids it causes contraction of the pupil. It is thus valuable in the treatment of preternaturally dilated pupil, and of prolapsus of the iris, whether from accident or after an operation for the extraction of the lens.

The internal use of the Calabar bean has hitherto been very limited ; Dr. Fraser, in his essay on this remedy, describes several cases in which he has administered it, and expresses his belief that, when more is known regarding it, it will be found, owing to its sedative property, to be of some value, administered internally, in the treatment of affections in which much pain and vascular excitement are present.

NOTES ON THE BRITISH PHARMACOPŒIA.

Showing the Nature and Extent of the Changes which have been Made,
and the Properties and Doses of the New Remedies and Preparations.*

No. I.

THE history of the British Pharmacopœia may be given in a few words. One of the sections of the Medical Act of 1858, from which so much professional benefit was expected to accrue, while the real results have fallen very far short of what was hoped for, provided that the General Medical Council should cause to be published under their direction "a book containing a list of medicines and compounds, and the manner of preparing them, together with the true weights and measures by which they are to be prepared and mixed, and containing such other matter and things relating thereto as the General Council shall think fit, to be called 'British Pharmacopœia;'" and it was further enacted, by a supplementary Act, that the British Pharmacopœia should be substituted for the three Pharmacopœias previously published under the sanction of the London, Edinburgh, and Dublin Colleges of Physicians. The power of publication of the Pharmacopœia having been thus transferred to the General Medical Council, steps were taken to promote its compilation, by the appointment of a Pharmacopœia Committee; and the different Colleges were requested to co-operate in this task, by the selection from their Fellows of delegates to be associated with the Special Committee appointed by the Council.

The results of the labours of this joint Committee have at last been issued, after much delay. Taken as a whole, the new Pharmacopœia is superior to any similar work which has hitherto been published; but when we consider the number of years occupied in its production, its attendant expenses, stated at not less than 6,000*l.* (13*l.* 10*s.* per page!), and the immense amount of talent which was brought to bear upon the subject, we cannot but feel somewhat disappointed at the result.

One of the greatest difficulties under which the Committee laboured, and to which the apparently inadequate results of their efforts must be, in great measure attributed, consisted in the circumstance that it was composed of a large number of persons holding, upon many points, almost diametrically opposite views; and, without desiring for one moment that our remarks should be construed into an insinuation of incompetent knowledge, on the part of any individual member, we believe that if the duty of compilation had been entrusted to a more moderate number of men, having frequent opportunities of meeting together, the work would have been done infinitely better, at one-fourth of the cost, and in one-fourth of the time occupied in the production of the present Pharmacopœia.

The publication of the Pharmacopœia in English instead of Latin is, we think, a wise step on the part of the Council; the Edinburgh and Dublin Pharmacopœias had already appeared in English, so that the innovation is not so great as some have supposed, while the simple fact that the Pharmacopœia is destined to become the text-book on the subject of which it treats, not only for thoroughly educated medical men, but also for the humblest pharmacist, is one which, of itself, furnishes sufficiently cogent reasons why the work should be printed in a language readily intelligible to all.

* In this paper, which will be completed in two or three numbers, it is proposed to give a series of explanatory comments upon the chief points of interest, omitting from consideration matters of a purely chemical character, as being of minor importance to our readers, when compared with those which are of a practical nature.

It is to be regretted that it partakes so much as it does of the nature of a mere catalogue, the *Materia Medica* division being limited to the enumeration of the names, principal characteristics, and preparations made from each medicinal agent. Had the properties, uses, and doses of the *Materia Medica* been briefly detailed, the *Pharmacopœia* might still have been kept within reasonable limits, and one great cause of dissatisfaction would have been obviated. The price at which the *Pharmacopœia* is sold is such as to warrant medical men in expecting a work complete in itself, instead of their being compelled to submit to further delay and expense in obtaining from extraneous sources information which ought to have been contained in the *Pharmacopœia* itself.

The change which has been introduced in the nomenclature of many preparations is very considerable: Calomel, formerly known as chloride of mercury, is altered to "subchloride of mercury," and corrosive sublimate, styled in previous *Pharmacopœias* bichloride of mercury, is now designated "chloride of mercury," the name hitherto given to calomel. This change of nomenclature is based upon good grounds, chemically speaking; we need scarcely insist upon the great importance of keeping it in mind, owing to the disparity in the strength of these two mercurial preparations. Tartar emetic is termed "*Antimonium tartaratum*, Tartarated antimony;" Nitrate of bismuth is altered to "*Bismuthum album*, white bismuth;" Chloroformyl is changed to "*Chloroformum*;" Potassio-tartrate of iron to "*Ferrum tartaratum*, Tartarated iron;" Plumbi oxydum to "*Lithargyrum*, Litharge;" Potassii sulphuretum is called "*Potassa sulphurata*, Sulphurated Potash;" Potassæ bitartras is now "*Potassæ tartras acida*, Acid tartrate of potash;" Quinæ disulphas is termed "*Quiniæ sulphas*." Other changes will be noted as we proceed with our paper. It may be observed, while we are writing upon the subject of nomenclature, that chemical symbols are introduced into the *Pharmacopœia* in the description of chemical compounds. This is a valuable addition, as it enables one to define a chemical compound more precisely and briefly than in any other way.

With regard to the measures and weights used, no alteration has been made in the former; but, as was stated in our last Number, a great change has been effected in the weights by the substitution of the avoirdupois grain, ounce, and pound for the troy weights formerly employed. The old symbols are discontinued, and are replaced by the less convenient oz. and dr. for ounce and drachm, respectively. The reasons for these changes are detailed in the preface, said to be from the pen of Professor Christison.

The book is divided into two principal parts, the first of which is devoted to the *Materia Medica*, and the second to a description of the mode of preparation of various compounds. There are also several appendices, containing lists of the articles which are employed in the chemical processes, but are not themselves used as medicinal agents, and of substances useful for analytical purposes, with some minor matters.

The following Tables will show the principal additions which have been made to the *Materia Medica*, the new preparations and the substances and preparations which have been omitted in the British *Pharmacopœia*, but were included in the last London *Pharmacopœia*.

TABLE I.—Principal Additions to the *Materia Medica*.

Acidum aceticum glaciale, *Acid. sulphurosum*, *Aconitia*, *Ammoniae benzoas*, *Ammoniae phosphas*, *Antimonii oxidum*, *Antim. terchloridi liquor*, *Argenti oxidum*, *Arnica*, *Beberiae sulphas*, *Bela*, *Calcis carbonas præcipitata*, *Calcis phosphas præcipitata*, *Cannabis indica*, *Chirata*, *Cocculus*, *Collodion*, *Conii fructus*, *Cusso*, *Digitalinum*, *Fel bovinum*, *Ferri et Quiniæ citras*, *Ferri oxidum magneti-*

cum, Ferri perchloridi liquor, Ferri pernitratidis liquor, Ferri phosphas, Ferrum redactum, Filix, Glycerinum, Hemidesmus, Kameela, Laurocerasus, Lithiæ carbonas, Lithiæ citras, Matico, Nectandra, Podophylli resina, Podophyllum, Potassæ citras, Pot. permanganas, Potassii bromidum, Sabadilla, Saccharum lactis, Santonica, Santoninum, Sodæ arsenias, Zinci acetas, Zinci carbonas, Zinci valerianas.

TABLE II.—New Preparations and Preparations contained in the last London Pharmacopœia, of which the names have been altered in the British Pharmacopœia. N.B.—The old names are inserted within brackets. Some substances are described in both the first and second parts of the British Pharmacopœia, but those which have been named in Table I need not be included also in Table II.

Acetum Gallicum (Acetum Britannicum), Aqua camphoræ (Mistura camphoræ), Aqua fœniculi, Aqua laurocerasi, Confectio sulphuris, Conf. terebinthinæ, Emplastrum calefaciens, Enema magnesiae sulphatis, Extractum anthemidis. Ext. belæ liquid., Ext. calumbæ, Ext. cannabis indicæ, Ext. ergotæ liquid., Ext. filicis liquid., Ext. krameriæ, Ext. opii liquid., Ext. pareiræ liquid., Ferri sulphas granulata, Hydrargyrum ammoniatum, (Hydrarg. ammon. chlor.), Hydrarg. oxidum rubrum (Hydrarg. nitrico-oxid.), Infusum aurantii (Inf. aurant. co.), Inf. catechu (Inf. catechu co.), Inf. chiratæ, Inf. Cusso, Inf. dulcamaræ, Inf. ergotæ, Inf. maticæ, Inf. senegæ, Inf. sennæ (Inf. sennæ co.), Inf. uvæ ursi, Lin. aconiti, Lin. belladonnæ, Lin. cantharis, Lin. chloroformi, Lin. Iodi, Lin. terebinth. acet., Liquor arsenicalis, Liq. antim. terchlor., Liq. atropiæ, Liq. caleis saccharat., Liq. chlori, Liq. hydrarg. nitrat. acid., Liq. potass. permanganatis, Liq. sodæ arseniatis. Liq. sodæ chloratæ (Liq. sodæ chlorinatæ), Liq. strychninæ, Mistura creasoti, Mist. scammonii, Mucilago acaciæ (Mist. acaciæ), Muc. amyli, Muc. traganthi, Myristicæ adeps (Myr. oleum), Pilula aloes Barbadosensis, Pil. aloes socotrin., Pil. aloes et assafoetid., Pil. assafoetid. comp. (Pil. galbani co.), Pil. calomel co., Pil. colocynth. et hyoscyami, Pil. ferri carbonatis, Pil. ferri iodidi, Pil. plumbi cum opio, Potassæ tartras acid. (Potass. bitartras), Pulvis amygdal. co., Pulv. aromaticus (Pulv. cinnamoni co.), Pulv. catechu co., Pulv. cretæ aromaticus (Pulv. cretæ co.), Pulv. cretæ aromat. c. opio (Pulv. cretæ co. c. opio), Pulv. Ipecac. c. opio (Pulv. Ipecac. co.), Pulv. Kino c. opio (Pulv. Kino co.), Pulv. Rhei co., Resina jalapæ, Resina scammoniae, Spiritus cajeputi, Spir. chloroformi (Ether chloric.), Spir. juniperi, Spir. lavandulæ, Succus conii, Succ. scoparii, Succ. taraxaci, Suppositoria acid. tannici, Supp. morphinæ, Syrupus ferri phosph., Syr. hemidesmi, Syr. rosæ gallicæ (Syr. rosæ), Syr. scillæ, Tinctura arnicæ, Tinct. bucco, Tinct. camph. c. opio (Tinct. camph. co.), Tinct. catechu (Tinct. catechu co.), Tinct. chiratæ, Tinct. cannabis indicæ, Tinct. cocci, Tinct. colchici semin. (Tinct. colchici), Tinct. conii fructus (Tinct. conii), Tinct. croci, Tinct. krameriæ, Tinct. ferri perchlor. (Tinct. ferri sesquichlor.), Tinct. iodinii (Tinct. iodinii co.), Tinct. nucis vomicæ, Tinct. Sabinæ, Tinct. senegæ, Tinct. sennæ (Tinct. sennæ co.), Tinct. stramonii, Tinct. valerian ammon. (Tinct. valerian co.), Trochisci acidi tannici, Troch. bismuthi, Troch. catechu, Troch. morphinæ, Troch. morph. et ipecac., Troch. opii, Unguentum aconitiæ, Ung. atropiæ, Ung. calomelanos, Ung. cocculi, Ung. hydrarg. ammoniat. (Ung. hydr. ammon. chlor.), Ung. hyd. iodid. rubri (Ung. hyd. iodidi), Ung. oxid. rubri (Ung. hyd. nitric. oxid.), Ung. plumbi carb., Ung. plumb. subacetat., Ung. resinæ (Cerat. resinæ), Ung. simplex, Ung. terebinth, Ung. veratriæ, Ung. zinci oxidi (Ung. zinci), Vin. antimonialis (Vin. antim. pot. tart.).

TABLE III.—List of Substances contained in the last London Pharmacopœia, but omitted in the British Pharmacopœia.

Absinthium, Ærugo, Aloe hepatica, Althæa, Anisum, Avena, Calamina præparata, Calcii chloridum, Canella Carota, Chimaphila, Cornu, Cornu ustum, Cydonium, Cuminum, Farina, Ferrum in fila tractum, Granatum, Helleborus niger, Inula helenium, Juniperus, Lactuca, Laurus, Manganesii binoxidum, Maranta, Mentha piperita, Mentha viridis, Morphinæ acetas, Mucuna, Ovi albumen,

Ovi vitellus, Panis, Petroleum, Piper longum, Pix (Pix nigra), Potassii ferro-cyanidum, Potassii sulphuretum, Pulegium, Pulegii oleum, Pyrethrum, Rhamni succus, Ruta graveolens, Sagapenum, Sago, Spiritus vini gallici, Staphisagria, Teribenthina chia, Ol. tigii, Tormentilla, Veratrum album, Viola, Acetum distillatum, Acet. cantharidis, Acet. colchici, Acet. scillæ. Ol. æthereum, Spiritus ætheris compositus, Liq. ammoniæ citratis, Liq. ammoniæ sesquicarbonatis, Atropiæ sulphas, Aqua pulegii, Cerata, Confectio aurantii, Conf. cassiæ, Conf. opii, Conf. rutæ, Decoctum chimaphilæ, Dec. cinchonæ pallidæ, Dec. cinchonæ rubræ, Dec. cydoniæ, Dec. dulcamaræ, Dec. gallæ, Dec. granati, Dec. hordei compositum, Dec. Senegæ, Dec. tormentillæ, Dec. ulmi, Dec. uvæ ursi, Emplastrum ammoniasi, Empl. cumini, Empl. potassii iodidi, Enema colocynthidis, Extractum cinchonæ pallidæ, Extr. cinchonæ rubræ, Extr. lactucæ, Extr. papaveris, Extr. pareiræ, Extr. uvæ ursi, Infusum armoraciæ compos., Inf. aurantii compos., Inf. cinchonæ pallidæ, Linimentum æruginis, Lin. ammoniæ sesquicarbonatis, Mel rosæ, Oxymel scillæ, Liq. aluminis compositum, Liq. arsenici chloridi Cupri ammonio-sulphas, Liq. cupri ammonio-sulphatis, Ferri ammonio-chloridum, Tinct. ferri ammon. chlor., Hydrargyri oxidum, Hydrarg. bisulphuretum, Plumbi iodidum, Potassa cum calce, Liquor potassæ carbonatis, Potassii sulphuretum, Liq. potassii iodidi compos., Mistura gentianæ compos., Mist. spirit. vini gallici, Pilul. aloes cum sapone, Pilul. conii compos., Pilul. ipecac. cum scilla, Pilul. styracis compos., Pulvis aloes compos., Spiritus ammoniæ foetidus, Spir. anisi, Spir. carui, Spir. cinnamomi, Spir. menthæ viridis, Spir. pimenti, Spir. pulegii, Sulphuris iodidum, Syrupus althææ, Syr. cocci, Syr. rhamni, Syr. sarsæ, Syr. violæ, Tinctura aloes comp., Tinct. ammon. comp., Tinct. cinchonæ pallidæ, Tinct. cinnamomi comp., Tinct. colchici comp. Tinct. cubebæ, Tinct. hellebori, Vinum veratri, Ungt. conii, Ungt. hydrarg. nitrat. mitius, Ungt. opii, Ungt. picis, Ungt. picis liquid., Ungt. plumbi compos., Ungt. plumbi iodid., Ungt. sambuci, Ungt. sulphuris compos., Ungt. sulphur. iodid.

A glance at the foregoing Tables will show the great alterations which have been made in the new Pharmacopœia, as compared with that last issued by the London College of Physicians, in 1851. Some of the new preparations are such as were not necessary, and the omissions (Table 3), include many compounds of considerable therapeutical value in certain cases.

We shall now proceed to notice *seriatim* the numerous points of importance in the British Pharmacopœia. In doing so, we shall chiefly direct our remarks to the medicinal properties, uses, and doses of new drugs and compounds as these are points of real practical interest, while the minute details of the manner of preparation principally concern the manufacturing chemist.

Acids.—*Acetic acid* has been slightly altered in strength, that in the present Pharmacopœia containing 28 per cent. of anhydrous acetic acid, instead of 30·8 per cent. The dilute acetic acid, which is directed to be made by mixing seven parts of water with one of the stronger acid, is also rather weaker than the dilute acetic acid of the London Pharmacopœia. A new form of acetic acid, *Acidum aceticum glaciale*, or glacial acetic acid (deriving its distinctive name from the circumstance of its remaining crystallised at a low temperature) has been introduced. It is composed of one equivalent of acetic acid with one equivalent of water, which serves as a base, and was previously included in the Edinburgh Pharmacopœia under the name of *Acidum aceticum*. It only enters into one pharmaceutical compound, *Mistura Creasoti*, and is meant for external use; it is a powerful caustic and escharotic, and may be used for the destruction of warty growths, &c., but its employment is not free from risk, as its caustic action upon the tissues to which it is applied sometimes extends to a considerable depth. The other new acid which has been introduced is *Acidum Sulphurosum*, sulphurous acid, dissolved in water. It is a strong deodoriser and deoxidiser, and possesses powerful bleaching properties. It is only intended for external use, and is valuable

in the treatment of various affections dependent upon parasitic origin. One of the best methods of applying it is in the form of a lotion, mixed with an equal quantity of glycerine. This plan has, however, its drawbacks, owing to the liability of sulphurous acid to decomposition, and the readiness with which it is given off in a gaseous form from the lotion, when applied; and Dr. Garrod, referring in his Lectures to this inconvenience, states that he prefers to use the sulphite or hyposulphite of soda, instead of the acid itself. A useful lotion may be made by the admixture of one ounce of either of these salts with one fluid ounce of acetic acid, and seven fluid ounces of water. The diseased part may be either sponged with this lotion, or it may be covered with a piece of lint previously well moistened with the liquid.

Dilute Acids.—The dilute hydrochloric and phosphoric acids have been slightly increased in strength, and the dilute nitric acid is made considerably stronger, so that the maximum dose of the new form is about 5 or 10 minims less than that of the same preparation in the London Pharmacopœia. Dilute *Nitro-hydrochloric acid*, which has been employed for many years as a tonic and alterative, especially in cases of chronic hepatitis, dyspepsia, and skin diseases, is now made officinal. Its dose, like that of either of the acids of which it is composed, is from 10 to 30 minims.

Aconitia.—This alkaloid, formerly called Aconitina, or Aconitine, which was omitted from the last London Pharmacopœia, is included in the British one. It is obtained from the root of the *Aconitum Napellus*, or Monkshood, and is a most virulent poison, so small a quantity as one-fiftieth of a grain of it having been known to place human life in danger, so that it is unfit for internal use. As an external remedy it is very serviceable in the treatment of neuralgic pains, which it often speedily removes. It may be conveniently used in the form of the *Unguentum Aconitiæ* (one of the new pharmacopœial preparations), in which eight ounces of the alkaloid are dissolved in half a fluid drachm of rectified spirit, and afterwards carefully mixed with one ounce of prepared lard. The French and German specimens of aconitia cannot be depended on, owing to their impurity and want of strength. Several grains of aconitia, procured from abroad, have been given to dogs, without producing any other effect than temporary drowsiness; while, on the other hand, the fiftieth part of a grain of this alkaloid, properly prepared, would be certain to kill a large dog in the course of one or two hours. Pure aconitia is completely dissolved in ether, and leaves no residue when it is burned with free access of air.

Ammonia Acetatis Liquor.—The solution of the acetate of ammonia is five times stronger, according to the new Pharmacopœia, than the *Liquor Ammon. Acetatis, Ph. Lond.*

Ammonia, Salts of.—Amongst the new preparations, two salts of ammonia, *Ammonice Benzoas*, and *Ammonice Phosphas*, are introduced. The former salt possesses the advantage over benzoic acid of being more soluble, so that it can be readily administered in the fluid form. It becomes converted into hippuric acid, which is eliminated by the kidneys, whose action is stimulated by it. The diuretic properties of the benzoate of ammonia renders it useful in the treatment of those affections of the kidneys in which their action is insufficient, of phosphatic gravel, and of chronic inflammation of the bladder and urinary passages. Dose: Ten to twenty grains. The phosphate of ammonia, composed of three equivalents of oxide of ammonia to one of tribasic phosphoric acid, has not been much employed in medicine in this country, although it is largely used on the continent. Like the other alkaline phosphates, it possesses the property of preventing the deposition of uric acid in the various tissues of the body; and it is consequently a valuable agent in the treatment of some urinary affections, and of gout and rheumatism, in which latter disorders it has

been especially extolled by Bergson and other German writers. It may be given in the same dose as the benzoate of ammonia, largely diluted with water, in which it is very soluble.

Antimonii Oxidum.—The oxide or teroxide of antimony, insoluble in water, but easily dissolved by hydrochloric acid, is introduced for the purpose of making *Pulvis antimonialis*, which replaces the *Pulvis Antimonii Compositus* of the London Pharmacopœia. The latter preparation consisted of phosphates and carbonates of lime, antimonious acid, and teroxide of antimony, the last-named being considered as the active principle of this preparation, which is an imitation of James's powder (*Pulvis Jacobi Verus*), to which it was inferior. The new form of antimonial powder may be administered in the same dose as the old one, attention being paid to the state of the stomach and the times at which it is given.

Argenti Oxidum.—This salt has a sedative action in some cases of irritability of the mucous membrane of the stomach and alimentary canal, and is also said to be serviceable in the treatment of passive hæmorrhages, and of various nervous affections, such as epilepsy, &c. Its use is likely to be exceedingly limited, as there are many other remedies which are better and safer; the dose would be from a quarter of a grain to a grain, made into a pill with crumb of bread.

Arnica.—The root of this plant, *Arnica montana*, has been introduced into the Pharmacopœia; and the officinal preparation from it is the tincture, which is made by macerating one ounce of the powdered root in a pint of rectified spirit. Some leading surgeons consider it as a very valuable remedy for external use in cases of bruises and sprains; but Dr. Garrod states that he found in a series of experiments instituted to test its efficacy, that it had little, if any, superiority over the application of plain spirit, which he consequently considers as equally efficacious with the tincture of arnica.

Beberice Sulphas.—This is the sulphate of an alkaloid, Beberia, obtained from the bark of the Bebeeru or Nectandra Tree, which grows in Guiana. It has been said by some few Scotch observers, including Dr. Maclachlan, to whose influence it probably owes mention, to be equal to quinine, both in tonic and antiperiodic power, and to possess the additional advantage of not stimulating the circulation or the nervous system. These views have not, however, been confirmed upon more recent trials, and its value in medicine appears to be so doubtful, as compared with substances possessing, in a marked degree, the properties which are imputed to this alkaloid, that it might have been left out of the present Pharmacopœia. For the information of those who may be desirous of giving this remedy a trial, we may state that it may be given in doses of from one to five grains, or even more, when antiperiodic effects are required.

Bela.—Bela, or Bael, as it is more frequently termed, is the dried unripe fruit of the *Ægle Marmelos*, belonging to the same natural order as the orange, to which fruit it bears resemblance in size. The rind is hard and woody; the fruit is usually imported from India in dried slices, or in fragments which consist of portions of the rind and adherent pulp and seeds. This pulp, which is mucilaginous when moistened, possesses valuable astringent properties, and a cure may often be produced by its administration, even after other remedies have failed, in diarrhœa and dysentery. It contains a considerable quantity of tannic acid, in addition to other ingredients. Professor Macnamara, of Calcutta, has succeeded in separating from it, by the aid of ether, a balsam having a strong odour, like that of Peruvian balsam, and he suggests that to this balsam is due the tone which this fruit gives to the coats of the intestines, rendering the secretions of the mucous membrane more healthy. Mr. Waring, of the Indian Medical Service, remarks, in an interesting paper in the "Medical Times" of Feb. 20th,

that the soft gummy substance may be advantageously taken in two-ounce doses, with three or four ounces of water, and sweetened with sugar, twice or thrice daily. It may be given in other forms, but the only one which is mentioned in the new Pharmacopœia is the fluid extract. This may be administered in doses of a teaspoonful or more.

Bismuthum Album, or White Bismuth, is the Bismuthi Nitras of the London Pharmacopœia. The reason for the change of name is not clear, as there are other preparations of bismuth of a white colour, besides which the new name gives no idea whatever of its chemical nature.

(To be continued.)

THE MONTH.

THE REAL POINT AT ISSUE IN TOWNLEY'S CASE.

Notwithstanding the length of time which has elapsed since Townley's trial, the agitation of the public mind continues as great as ever. The newspapers teem with articles and correspondence on the subject of murder, insanity, and capital punishment; while, night after night, the House of Commons wastes valuable time in attempting to determine what constitutes a lunatic (a question almost as perplexing to its members, apparently, as Sir Robert Peel's celebrated query, "What is a pound?"). The real matter at issue, however, seems to us to be, not whether the plea of insanity shall be accepted as valid in Townley's case, but whether capital punishment, or, as its opponents call it, "capital murder," shall be done away with. We have not time to enter upon a recapitulation of the arguments, "pro" and "con," as regards hanging; but we must observe, that the reasons for a continuance of this utmost penalty, in the case of murderers, appear too powerful to be shaken by anything which has yet been urged in favour of the abolition of capital punishment. It would be better if our legislators, instead of endeavouring to conceal their inability to define insanity, by uttering vague and inaccurate charges against the medical profession, would direct their attention to the question of capital punishment. Until this has been permanently settled, we may naturally expect that persons charged with murder will almost invariably, as a last chance of escape, set up through their counsel the plea of insanity, taking advantage of the knowledge that a section of the community, striving its utmost to diminish the number of criminals hanged, since it cannot so far modify public opinion as to procure the abolition of capital punishment, is too ready to give a willing ear to this excuse, no matter how little it may be founded upon actual facts.

MEDICAL INTELLIGENCE.

ROYAL COLLEGE OF SURGEONS.—At the next annual election of Fellows into the Council of this Institution, there will be at least three vacancies declared, caused by the death of Mr. Green, the resignation of Professor Gulliver, and the retirement in the prescribed order of Mr. Hancock, who will, however, offer himself for re-election.

UNIVERSITY OF LONDON.—Her Majesty has nominated the Right Honourable Edward Cardwell, M.P., and Dr. William Sharpey, Secretary to the Royal Society, to be Members of the Senate of the University of London.

BIRMINGHAM CHILDREN'S HOSPITAL.—The Committee of this Institution have placed some restriction on the admission of children. It is now required that the parents, previous to sending a child, shall make a statement as to the total earnings of the family, the number of children, &c.; and upon these data the admission of the child is made to depend. Since these regulations have been adopted, a marked diminution in the number of applicants has taken place.

INSANE PRISONERS.—Sir George Grey's Bill provides that the inquiry by two or more justices into the insanity of a prisoner is to be conducted by visiting justices, "if the prison is one to which visiting justices are appointed." Also, instead of the enactment, that the two justices are to inquire, "with the aid of" two medical men, this Bill directs the two justices "to call to their assistance" two medical men, thus making the justices responsible for the selection of the medical men. The medical men are to be persons registered under the Medical Registration Act. On receiving from the justices and the medical men a certificate that a prisoner is insane, the Secretary of State "may, if he shall think fit," direct that the prisoner be removed to a lunatic asylum. In regard to the very important subject of the release of a prisoner who has been insane, the Bill proposes, that if two registered medical men shall "duly certify" to the Secretary of State that the prisoner "is sane," the Secretary of State shall be "authorised" to direct that he be discharged out of custody if the term of his sentence has expired.

ST. MARY'S HOSPITAL, MANCHESTER, which has hitherto been exclusively devoted to the treatment of diseases peculiar to females, has extended its field of operations by the addition of cancer wards.

SIR WILLIAM WILDE.—The Lord Lieutenant has conferred the well-deserved honour of knighthood on William Robert Wills Wilde, Surgeon-Oculist in Ireland to Her Majesty, and Assistant Census Commissioner. Sir William

has many high claims to that distinction. His labours in Ophthalmology long since raised him to a high position in that department of surgery, and his devotion to the elaboration of the vital statistics of Ireland has enabled him to render great public service in this important matter.

THE ALLEGED POISONING BY A SURGEON AT HAYLE.—The inquiry into this protracted case was concluded on Friday last. Dr. Taylor, to whom had been committed the analysis of the contents of the stomach of the deceased, said that his death was attributable to an attack of serous apoplexy to which he was predisposed, and that the symptoms were not consistent with any form of poisoning within the knowledge of the analyst. The accused was necessarily acquitted, and left the court amidst the congratulations of his friends—a result which must be satisfactory to his professional brethren.

DONCASTER DISPENSARY.—Several meetings have recently been held at Doncaster, attended by the principal inhabitants, to consider the propriety of founding an Infirmary in that place. There is every probability that the proposed institution will be established.

PUBLIC DINNER TO THE LATE SHERIFF OF CORNWALL.—At a meeting held on the 9th of February, at Penzance, it was resolved to invite Mr. W. Coulson, late Sheriff of Cornwall, to a public dinner, as a means of acknowledging the able and courteous manner in which he discharged the duties of his office during the last year. A committee was appointed to make the necessary arrangements.

REPORT ON SARRACENIA PURPUREA IN SMALL-POX.—A committee appointed by the New York Medical Society to report upon the recorded experience as to the merits of the *sarracenia*, has arrived at the following conclusions:—1. That the analyses already made of the plant do not give any active principle or element which would indicate any medical potency. 2. That the discoverers and advocates of its specific remedial power have apparently given too great credit to the *post hoc* circumstances as being *propter hoc* influences; one reason for this latter inference being suggested by the loose, unscientific, and eulogistic style of the communications. 3. That the reliable recorded experience appears to preponderate against the remedial efficacy of this plant in those forms of the disease which do not generally recover under the administration of ordinary remedies.—*American Medical Times*.

PASS-LISTS.

ROYAL COLLEGE OF PHYSICIANS, LONDON.—At a general meeting of the Fellows, held on February 15th, the following member was admitted:—Birch, Scholes Butler, M.D., Upper Kensington. The following gentlemen were admitted as Licentiates:—Brietzcke, Henry, Deptford; Cameron, Charles, H.M. Bengal Army; Gill, William, Truro, Cornwall; Maclure, Duncan Maclachlan, 16, Harley-street; Mickley, Arthur George, Buntingford; Morgan, Cosby William, Newcastle, New South Wales; Parry, Henry Hitchcock, Allington, Devizes; Thomas, George Frederick, Taranaki, New Zealand; Williams, Kenrick Henry Bold, Llansaintffraid, Conway. The following candidates passed the first examination:—Bagnell, Samuel Freeman, King's College; Bell, William, King's College; Burge, Frederick John, King's College; Collier, Thomas, Guy's Hospital; Powne, Benjamin Lamb, St. Bartholomew's Hospital; Rigden, George William, University College.

APOTHECARIES' HALL, LONDON.—On February 4th, the following gentlemen were admitted to the Licence:—Haines, Robert Wheeler, Bromsgrove; Soper, Robert Willis, Dartmouth, Devon. On the 18th of February the following Licentiate was admitted:—Carpenter, Edward, St. Thomas's Hospital. The following candidates passed the First Examination:—Messrs. Griffith Griffith and George W. Rigden, of University College; William Bell, Edmund F. Boulton, and M. W. Wilkin, of King's College; A. C. Rayner, of Charing Cross Hospital; and F. W. Taylor, of St. Thomas's Hospital.

ROYAL COLLEGE OF SURGEONS, LONDON.—The following gentlemen were admitted to the Membership on the 28th of January:—Anthonisz, James Edmund, L.S.A., Ceylon; Bennett, Charles John, Buxton, Derbyshire; Cockerton, Alfred John, Islington; Curgenvin, William Grafton, M.D., Plymouth; Garlike, Edward William Bennett, Tulse-hill; Green, Frederick King, Stoke Newington; Griffin, Frederic Charles Griffith, Weymouth; Hewby, John Petch, Ripon, Yorkshire; Hope, Frederick Samuel, Kerby-Fleetham, Yorkshire; Jones, Hermann Johnston, M.D., Upper Clapton; Langhorn, Joseph, Saville-row; Law, Caleb, Australia; Long, Henry Plater, Barham, Canterbury; M'Connell, William, Lisburn, Ireland; Pearson, Edwin B., Yeaveley, near Ashbourne, Derbyshire; Peirson, George Brigg, Leeds; Penn, William Cecil, Edwardes-square, Kensington; Philpot, Frederick, L.F.P. & S. Glas., Chelsea; Skinner, William, Sheffield; White, George, Dalston.

MEDICAL VACANCIES.

GREAT NORTHERN HOSPITAL.—For a Physician. Testimonials to be sent in before March 5th.

ST. LUKE'S HOSPITAL FOR LUNATICS.—For a Resident Medical Superintendent. Salary £200 per annum, with board and apartments. Election to take place on the 11th of March.

ROYAL GENERAL DISPENSARY, BARTHOLOMEW CLOSE.—For a Physician. Applications to be sent in before March 7th. Election fixed for March 21st.

NOTTING HILL DISPENSARY.—For a Resident Medical Officer. Salary £80, with rooms, attendance, &c. Applications to be sent in before February 12th.

GREAT NORTHERN HOSPITAL.—For a House-Surgeon. Applications to be made before February 12th. Further particulars to be had of the Secretary.

TORBAY INFIRMARY, TORQUAY.—For a House-Surgeon. Salary £95, with lodgings, attendance, &c. Testimonials to be sent in on or before March 14th.

UNIVERSITY COLLEGE HOSPITAL.—For a Resident Medical Officer. Applications to be made before March 14th.

NORTH RIDING INFIRMARY, MIDDLESBOROUGH.—For a House-Surgeon. Salary £70, with board and residence. Testimonials to be sent in not later than March 23rd.

NORTH STAFFORDSHIRE INFIRMARY, STOKE-UPON-TRENT.—For a House-Surgeon. Salary £100, with furnished apartments and board. Applications received up to March 3rd.

MEDICAL APPOINTMENTS.

ABSOLON, G. W., M.D.—Visiting Surgeon to the Perth Infirmary.

BARRETT, J. J., M.D.—Medical Officer to the Christchurch District, St. Saviour's Union, Southwark.

BLUETT, J., Esq.—Medical Officer to the Chesterfield District and Workhouse of the Chesterfield Union.

BOOTH, C., M.D.—Surgeon to the North Derbyshire Hospital.

BOWEN, Essex, M.D.—Surgeon to the Birkenhead Hospital.

BUCKLE, F., M.D.—Assistant House-Surgeon to the Kent and Canterbury Hospital.

BUTLER, F. J., M.D.—Surgeon to the County Prison, Winchester.

CANDLISH, H., M.D.—Surgeon to the Alnwick Infirmary.

CHILCOTE, W. E., Esq.—Medical Officer to District No. 6, of the Totness Union.

CLARKSON, T., Esq.—Medical Officer to the Bedale District, Leyburn Union, Yorkshire.

COCK, F., M.D.—Consulting Physician to the Farringdon Dispensary.

DAWSON, R. H., Esq.—Medical Officer to the Eastern District, Pateley Bridge Union, Yorkshire.

DIXON, J., M.D.—Surgeon to the Surrey Dispensary.

EASTEN, G. F., M.D.—Physician to the Alnwick Infirmary.

ELKINGTON, G., Esq.—Junior Resident Surgeon, General Dispensary, Birmingham.

EVANS, Thomas F., Esq.—Resident Surgeon to the Hull Infirmary.

GALTON, John H., M.D.—Resident Medical Officer, Carey Street Dispensary, Lincoln's Inn Fields.

GEE, S., Esq.—Medical Registrar to the Hospital for Sick Children, Great Ormond Street.

HALL, W., Esq.—Assistant-Surgeon to the Hospital for Women and Children, Leeds.

HEAD, E., M.B.—Consulting Physician-Accoucheur to the St. Pancras and Northern Dispensary.

HEMMING, C., M.D.—Coroner for the Borough of Abingdon.

JEPSON, Octavius, M.D.—Medical Superintendent of the City of London Lunatic Asylum.

KEMPTHORNE, J., Esq.—Medical Officer to the Callington District of the Liskeard Union.

LAMBERT, J., M.D.—Surgeon to the Birkenhead Hospital.

LEISHMAN, W., M.D.—Lecturer on Clinical Medicine, and Physician to the Glasgow Infirmary.

LYELL, H., Esq.—Medical Officer to the St. Olaves Union, Southwark.

MOORE, H. G., Esq.—House Surgeon to the East Suffolk Hospital, Ipswich.

MORRIS, J., Esq.—House Surgeon to the Warneford Hospital, Leamington.

- PITMAN, E. H., Esq.—Medical Officer to the Cheadle District, Stockport Union.
- REED, G., M.D.—Resident Medical Officer to the Manchester Royal Infirmary.
- RINGER, S.—Assistant-Physician to the Hospital for Sick Children, Great Ormond Street.
- SHARMAN, J., Esq.—Medical Officer to the Norwood District, Lambeth Union.
- STOKES, W., Esq.—Surgeon to the Meath Hospital, Dublin.
- WALLACE, J., Esq.—Medical Officer to the Dalston District of the Carlisle Union.
- WOOD, F. H., Esq.—Medical Officer to the Brookland District, Romney Marsh Union.
- WRIGHT, W. E., Esq.—Medical Officer to the Fulhamtown District of the Fulham Union.

DEATHS.

- COWCHER E., Esq., Coroner for the borough of Abingdon, on Jan. 31, aged 77.
- DAVIS, Henry R., M.D., on Feb. 16, at 12, Addison Road, North, W., after a few days' illness.
- ESTE, Michael Lambton, M.D., late 1st Life Guards, at 207, Marylebone Road, on January 26, aged 84.
- GUNN, John, Esq., Surgeon, R.N., at Edinburgh, on Feb. 8.
- HEADLAM, T. E., M.D., at Newcastle-on-Tyne, on Feb. 18, aged 86.
- JONES, W. Vaughan, Esq., at Festiniog, Merionethshire, on Feb. 3, aged 41.
- JONES, John, Esq., at 5, Seymour Place, Wandsworth Road, on Feb. 10.
- LAWSON, Joseph A., M.D., Deputy Inspector-General of Hospitals, at Horbury Crescent, Notting Hill, W., on Feb. 11, aged 57.
- PARTRIDGE, William, Esq., at Bordesley, Birmingham, on Feb. 6, aged 44.
- PEARCE, Samuel, Esq., at Bethnal Green Road, on Feb. 3, aged 54.
- WARD, Isaac Dunlin, Esq., at Lincoln, on Feb. 4, aged 28.

LIST OF BOOKS, ETC., RECEIVED.

- Casper's "Forensic Medicine." Vol. III. (New Sydenham Society).
- Mitchell "On the Insane in Private Dwellings."
- MacLachlan "On the Diseases and Infirmities of Advanced Life."
- "The Anthropological Review." (Quarterly).
- "The Dental Review." (Quarterly).
- "Spectropia." By J. H. Brown.
- "The Social Science Review."
- "The Pharmaceutical Journal," for January and February.
- Weber "On the Pathology of the Crura Cerebri."
- "Insanity and Crime." By the Editors of the "Journal of Mental Science."
- Gibb "On the Laryngoscope."
- Banting's "Letter on Corpulence."
- "Excessive Infant Mortality." "The Practice of Hiring Wet Nurses."
- "The Comparative Properties of Human and Animal Milks." By M. A. Baines.

NOTICE.—Our Monthly Abstract of Papers selected from British and Foreign Medical Journals is in type, but has been omitted to make room for original matter.

THE MEDICAL MIRROR.

APRIL, 1864.

ORIGINAL COMMUNICATIONS.

Remarks on Lithotrity: with Record of Fifteen Cases of Stone.
By WALTER COULSON, Esq., F.R.C.S., Surgeon to the
Lock Hospital, &c.

It is not my intention, in this paper, to attempt a systematic account of this operation. I wish to offer a brief record of fifteen cases of stone in the bladder that I have treated, with such remarks as they have suggested; for I believe that in no way is surgery more surely advanced than by the careful observation and conscientious record of cases, and the conclusions derived from their study by individual observers. The ordinary symptoms of stone are well known; but the cases in which we can feel certain of the presence of a calculus in the bladder before sounding, are not common; and though the contact of the sound with a stone is conclusive as to its presence, there are very many instances in which a negative result leaves no satisfactory impression as to its absence. One object, therefore, will be to give increased precision to the diagnosis before sounding, and to render this operation more conclusive; but my chief aim is to contribute whatever practical points in my experience seem to have value. I shall briefly give the cases, dwelling only on those which have presented points of interest, and which have furnished subjects for the remarks which will follow.

CASE I.—A publican, æt. 60, applied to me in 1859, with slight urethral discharge, pain in passing water, especially at the end of the penis, and occasional incontinence after exercise. He had been twice sounded by a hospital surgeon, who failed to detect stone. When I first saw him I examined

with an English lithotrite, at my own house, and found a fair sized calculus, which I crushed. On his return home he was seized with a shivering fit, which was followed by slight cystitis. He was kept quiet for ten days before any further operation was attempted. He afterwards progressed favourably, and was cured in three more sittings.

CASE II.—*A medium-sized Uric Acid Calculus ; Lithotrity ; Three Operations ; Cured.*—A waggoner, æt. 55, consulted me with symptoms of stone, in 1861. Mr. Aston Key had performed lithotrity on him some ten years before. I examined with lithotrite, and crushed a medium-sized stone. The operation was repeated twice, and on each occasion he walked home, a distance of two miles. After being under treatment three weeks he was cured, and able to resume his work.

CASE III.—*Small Uric Acid Calculus ; Symptoms of Stone ; Six Weeks ; Cured at one Crushing.*—A patient, æt. 45, applied to me, suffering from frequent desire to pass water, and considerable pain at the end of the penis during micturition. He had also noticed, more than once, that blood passed with the last few drops of urine. I examined with a scoop lithotrite, detected a small calculus, crushed it, and brought it away. This operation was followed by the immediate disappearance of all unpleasant symptoms.

CASE IV.—*Uric Acid Calculus ; Medium Size ; Lithotrity ; Five Sitzings ; Cured.*—Mr. T., of Southampton, æt. 40, applied to me, June 27th, 1861, suffering from symptoms of stone. Eight months before, after severe pain across the loins, and a long course of ureters, he noticed blood in the urine, since which he had been constantly troubled with bladder irritation. I examined him with lithotrite in my own house, and crushed a medium-sized stone. He was operated on four times subsequently, and returned to Southampton July 20th. He came to London again August 3rd, complaining of pain and irritation in the urethra. August 6th a large catheter was introduced, the bladder was injected, and some debris were brought away. As the catheter was withdrawn a jagged portion of stone was dislodged from the membranous portion of the urethra, and came away in the eye of the instrument.

CASE V.—*Medium-Sized Stone ; Removed by Lithotrity in Five Sitzings ; Cured.*—Mr. W., of Brompton, æt. 65, had suffered for some time from symptoms of stone. I passed a catheter, and drew off the urine, injected four ounces of water, and with the sound detected a stone. July 28, 1860, I crushed the calculus without difficulty. The next day he had no bad symptoms, and was sitting up in his bedroom. There were four subsequent crushings. The final examination was post-

poned to September 17th, in consequence of a large carbuncle forming at the back of his thigh.

CASE VI.—*Uric Acid Stone; Lithotrity; Cured after Six Operations; operated on for Calculus by Lithotrity in 1851.*—General S., æt. 79, consulted me April 15th, 1862, in consequence of some of his old symptoms having returned. I examined with lithotrite, and crushed a stone; after which he returned home. I operated on him on five subsequent occasions; the last taking place June 24th. There was never any increased bladder irritation in consequence of the presence of fragments, but the shock to the system rendered a long interval advisable between each operation.

CASE VII.—*Phosphatic Calculus; very Irritable Bladder; Fragments brought away in scoop; Cured*—Mr. F., æt. 56, was treated for stone by lithotrity, in May, 1854. He consulted me January, 1863, his symptoms having returned in a much more violent form. He was disturbed to pass water twenty times during the night, and could not retain it for more than half an hour in the day, and it always passed with great pain. In consequence of this irritation I ordered him some morphia, and directed him to keep in bed, and not pass urine for an hour before my visit; with this last injunction he was unable to comply, and accordingly I made an attempt to inject a little water into the bladder, but I found he could not retain an ounce of fluid, and I was accordingly obliged to defer my examination. I made several unsuccessful attempts with a lithotrite without injecting; sometimes the bladder was so irritable that directly the instrument reached the membranous portion of the urethra the urine came away with a gush by the side of the lithotrite; at other times as soon as it touched the bladder, and before the blades could be opened he would be seized with a violent spasm, and fairly force out the instrument. On the 14th February, I for the first time crushed the stone once, and brought away the debris in the lithotrite scoop, taking care to screw the instrument as closely as possible, to prevent laceration of urethra; and he suffered no inconvenience from my manipulations. After repeated failures, from the causes mentioned, I succeeded in extracting the last fragment of stone the 6th October, and he has been perfectly well ever since, though previous to the last portion being removed it was an exception for him to hold his water more than half an hour. I operated altogether about five times, and he always walked home afterwards; but I never attempted to crush the stone more than once, in fact this would have been impossible, as the urine always escaped with the withdrawal of the instrument, and often before. I entirely attributed my success in this case to my

never attempting to inject; to closely watching my opportunity; and to a French instrument, with unusually short blades, which allowed of its being turned when there was certainly not more than an ounce or an ounce and a half of water in the bladder. During the treatment of this case I was so disheartened that I more than once advised him to submit to lithotomy.

CASE VIII.—*Partial Paralysis of Bladder; Phosphatic Calculus, size of Almond; Cured by Lithotrity, after four Operations.*—Mr. F., solicitor, æt. 63, was operated on for stone in 1856, by lithotrity. Symptoms returned in 1863; his urine was ammoniacal and loaded with pus and mucus. I desired him to make water in my presence, and immediately afterwards passed catheter and drew off 8 ounces of urine. I injected 4 ounces of luke-warm water and examined with lithotrite and crushed a stone once. Four operations and he was cured, the last three having been performed at my own house. Paralysis of bladder continuing, I directed him to pass a catheter night and morning, and to come to me occasionally and have his bladder washed out.

CASE IX.—*Uric Acid Calculus; Symptoms 18 months, commencing with Hæmorrhage after hunting; Four Crushings; Cured.*—Mr. F., æt. 67, from Scotland, at the beginning of the hunting season of 1862, first noticed blood in his urine in considerable quantity, after a hard ride. This was accompanied with a sense of uneasiness in the region of the bladder and of the penis. The hæmorrhage always recurred after a hard gallop. He consulted an eminent physician in Edinburgh, who sounded him and failed to find a calculus. May 2nd, 1863, I sounded him, and detected a stone the size of an almond, very hard, and composed of uric acid. Lithotrity performed May 6th, and three times subsequently. A final examination, June 1st, proved him to be perfectly cured, and he has been able to hunt this season.

CASE X.—*Spontaneous Detachment of Shell of Stone; Two Calculi; Cured by Lithotrity; Five Operations.*—A patient from Derby, æt. 61, consulted me May 26th, 1863. Has suffered from bladder irritation for the last five years; noticed blood in urine after exercise two years since. Seven months ago a small portion of the shell of a stone came away, and after an interval of a week another bit; he continued to void pieces occasionally with his urine for five or six weeks, at the end of which time the shell of a fair sized calculus had been passed.

During this period the urine was deeply tinged with blood. When I first saw him he was suffering in consequence of his journey from so much irritation that it was

impossible to examine him. I ordered him to bed, and not to get out even to pass water. I fixed the time for my visit next day, and directed him to retain the urine for an hour, if possible, before seeing me. May 27th, I introduced a lithotrite, and without difficulty seized and crushed a medium-sized stone. I was satisfied with doing this once, as the water was passing along the urethra during the operation; on this occasion I felt the second stone. No bad symptoms followed. Second crushing May 30th. The bladder was much less irritable, and I was enabled to crush three or four times. Third operation two days after. The irritation had so much subsided that the lithotrite could be borne in the bladder for five minutes, and I was enabled to break up fragments several times. Debris now passed in great abundance; this being the case, I did not operate again until the 8th June. Two more sittings and he was cured. When he came to town he could not hold his water more than five or ten minutes whilst moving about or standing, and when he left he could retain it comfortably for five or six hours, and voided urine without pain. He has continued well up to the present time. In this case the patient was kept in bed until the first three operations were performed, and the bladder was never injected previous to crushing.

CASE XI.—*Uric Calculi; Lithotrity; Cured; Seven Sitzings.*—A patient from Stafford, æt. 63, consulted me October 1st, 1863. Had passed blood in his urine a year ago. Complained of great pain of the end of the penis during micturition, tenderness in sitting down, and incontinence, and blood in his water after exercise. I passed catheter and drew off 2 ounces of urine, and injected 4 ounces of warm water. I introduced lithotrite, found a fair sized calculus, crushed it once, and withdrew the instrument. No bleeding after operation except from contracted orifice of urethra. Slight shivering fit in the night after getting out of bed. Passed water with less pain than before the operation. Second operation October 4th. Found a second stone somewhat larger than the first. No shivering. Five more operations and he was cured. At the final examination with lithotrite, on the 27th, a small fragment was crushed. After this he had an attack of orchitis; this did not prevent his returning home two days after the examination. The fragments that were kept weighed nearly six drachms.

CASE XII.—*Uric Acid Calculus, size of Almond; First Symptoms, Blood in Urine; Three Crushings; Cured.*—Mr. B., of Biggleswade, æt. 67, consulted me in August, 1862. He had frequent desire to pass water with occasional incontinence. In September cub hunting began, and after the second

day he noticed blood in his water. This disappeared with rest. He tried hunting again in October, and the blood reappeared. He consulted an eminent surgeon in London, who did not consider his symptoms dependent on stone. Early in November hunting again induced blood, and he was sounded, but no stone was detected, and he was advised to give up hunting; this to him was a great privation, as he was a master of fox hounds. The beginning of this season, after riding, he again passed blood. When I first saw him with his medical man, I thought from his history that there was a foreign body of some sort in the bladder; but I declined to examine him, as he was obliged to return that afternoon. October 28th, I met Mr. Stevens in consultation; the bladder being empty, I injected 4 ounces of water. I introduced a lithotrite, and after some difficulty I caught a stone, the size of an almond, lying on the floor of the bladder, a little distance to the right of the median line. I crushed it once and withdrew the instrument. He was sitting up next day, but retiring at night to a cold bed-room, had a slight rigor. I operated the second time November 2nd, crushed fragments three times. No unpleasant symptoms followed, no blood during operation. Debris began to pass freely. Third operation November 5th; did not inject; crushed a small fragment. Made final examination on the 18th, and could find nothing. I advised him to try a ride before he left town; this he did, and experienced no inconvenience from the experiment. He has since been hunting two or three times a week, and has continued well.

CASE XIII.—*Eleven Calculi Removed by Lithotomy; Paralysis of Bladder; Lithotritry Attempted and deemed Inexpedient.*—A patient from Southampton, æt. 64, has had symptoms of stone since 1859. First came under my care November 11th, 1863. He was then suffering a good deal in consequence of his journey by rail, was passing water every half-hour, in great pain. I introduced catheter and drew off half a pint of water, and at once came in contact with stone. I attempted to pass a French lithotrite, but failed, though the largest catheter passed with ease.—November 20th. I requested Mr. Coulson to see him with me, and with a little difficulty he introduced an English lithotrite, and a stone was crushed. I should mention, that since the first examination his water had been drawn off four times daily, otherwise he suffered much from repeated and ineffectual efforts to pass it. November 24th. Mr. Coulson failed in attempting to pass a lithotrite, and it was considered advisable, in consequence of the paralysis, the peculiar conformation of the urethra, and the quantity of stone, to resort to lithotomy. This operation I performed in

the usual way on December 2nd, in the presence of Dr. Broadbent, Messrs. Shilitoe, Cooper, Scott, and Griffiths. Eleven stones were removed, the size of small nuts, one in fragments from crushing. But little blood was lost; he rallied well after operation, and returned home, December 30th, cured.

CASE XIV.—*Two Phosphatic Calculi; one Encysted; Lithotomy; Died.*—Captain B., æt. 57, was in good health up to 1858. The early part of that year, he observed blood in urine after sharp walking. After a time the blood disappeared, but he had pain, difficulty, and straining in passing water. He consulted different physicians and surgeons, and was sounded more than once, but no stone was detected. I first saw him July, 1863. He was then passing water every half hour. I introduced a catheter, and found that he never emptied his bladder, and I taught him to pass an instrument, and directed him to use it four times daily. I also examined him with lithotrite, but could find no stone. The use of the catheter seemed to afford great relief; he slept better at night, was able to go four or five hours without being disturbed, and his general health improved. This state of things was not destined to last long, and his severe symptoms returned at November. The use of the catheter no longer relieved him; he had constant uneasiness about the rectum, and rising from the sitting posture induced immediate desire to pass water, and he was compelled to go to the stool at the same time.—November 30th. I again examined him with lithotrite, felt a stone, but was unable to seize it. The bladder being extremely sensitive I did not persevere.—December 2nd. I introduced lithotrite whilst he was under the influence of chloroform, and crushed a stone. No bad symptoms followed, and during the night a few minute fragments were passed.—December 5th. Again examined under chloroform. The lithotrite came in contact on the left side of the floor of the bladder, with a calculus, which was apparently fixed. I made repeated attempts to get it within the blades of my lithotrite, but was unable to succeed, although I could distinctly feel them passing over the surface of the stone. I concluded that the bladder was fassiculated, fixing a stone in this position. The stone that I had previously crushed I felt at the neck of the bladder as I introduced the instrument. After these two careful trials I considered that the case was essentially one to which lithotrity was inapplicable, and I requested Mr. Coulson to see the patient with me in consultation, and he advised lithotomy. I mentioned the names of two other surgeons whose opinion I should like, but the patient was averse to any further delay, and was anxious for the operation. On

the 9th December, I performed lithotomy in the presence of Mr. Coulson, Dr. Broadbent, Messrs. Shillitoe, Cooper, and Scott. The first stone was removed in fragments, without difficulty. Examining with a searcher, I felt the encysted one, and after some trouble this was removed with the ordinary forceps. There was not much blood lost at the time, and none after the operation, and a favourable reaction from the shock and chloroform took place. He had 20 minims of Tinct. Opii. at bedtime, and passed a fair night.—December 10th, 9 A.M. In good spirits, no great pain, tenderness over region of bladder. P. 100, T. dry and red. At 1 P.M. about the same, and when seen again in the evening seemed to be doing well; urine passing freely through the wound. December 11th, 4 A.M. Called to see him. He was suffering much pain in bladder; no water has passed since 12. I introduced female catheter through wound, and drew off about 6 oz. of bloody and strongly ammoniacal urine. Afterwards injected a little lukewarm water. P. 120, T. red and dry. At 11 A.M. less pain. No urine had passed. Introduced catheter, and drew off 4 oz. of urine. The abdomen was distended, and he had occasional pain in bowels. Ordered cajeput oil. This afforded great relief, as much flatus was passed per anum. At 11 P.M. No pain. Drew off urine, and washed out bladder.—December 12th, 3.30, A.M. Slightly delirious. Drew off water. T. moist at edges, but dry and red in centre. Increased quantity of brandy.—8 A.M. Comatose, pupils contracted, skin perspiring, and other symptoms of uremic poisoning, and he died at 4 P.M. A post-mortem examination showed that there was no peritonitis. The mucous membrane of the bladder was slightly inflamed, but the inflammation had not extended along the ureters. These were greatly dilated, and one of the kidneys reduced to a mere sack, the other being also injured, though to a less degree by the long-standing bladder affection. A sacculus was formed to the left of the median line of the bladder, which had evidently lodged one of the calculi, and in which particles of the outer shell could be still felt with the point of the finger. The orifice of the sack was small, and had doubtless contracted considerably since the removal of the stone.

CASE XV.—*Small Uric Acid Calculus; Lithotrity; One Crushing; Cured.*—A distinguished member of the legal profession, æt. 65, some months since had a stone removed entire by means of a lithotrite. This occasioned bleeding and considerable pain at the time, and left tenderness in prostate portion of urethra, of which he still complained when I saw him. I was consulted, as he noticed a little blood in urine after riding on horseback. He was directed not to pass

water for an hour and a half before my visit.—November 17th, 1863. I introduced a French lithotrite scoop, and found a small stone lying in the pouch behind the prostate. This I seized, in the manner hereafter described, and completely crushed. The removal of instrument occasioned no pain, and no blood followed the operation. He has remained quite well, and can take horse exercise. The chief pain experienced in the operation was the passage of the lithotrite over the surface of the urethra; that was sore from the previous operation.

(To be continued.)

On Change of Air in the Prevention and Cure of Pulmonary Phthisis. By JOHN C. THOROWGOOD, M.D., M.R.C.P., Lond., Assistant-Physician to the City of London Hospital for Diseases of the Chest, Victoria Park, late Physician to Royal General Dispensary.

IN all affections, whether acute or chronic, of the lungs and air-passages, attention to the state of the atmosphere which surrounds the patient, and is therefore in constant and intimate contact with the diseased surfaces, is a matter of the very first importance.

The physician, when called to a case of acute bronchitis or pneumonia, usually makes his first directions for treatment emphatically to bear on the regulation of the temperature of the patient's chamber, and means are at once taken to ensure free ventilation consistently with the maintenance of a due degree of warmth, and such an amount of moisture in the air as any special exigencies of the case may seem to demand.

In the more chronic pulmonary affections, as phthisis, asthma, emphysema, and chronic bronchitis, the selection of an air and climate suitable for the invalid to reside in is always a matter of anxious consideration. How can we reasonably expect to see a case of active phthisis, with great irritability and spasm of the air tubes, and frequent intercurrent inflammations, improve, while the patient is hourly drawing through his intensely susceptible chest a keen and cold, though doubtless highly bracing air; or, on the other hand, how often do we see disastrous results follow on the removal of a patient, languid, exhausted, and perhaps far gone in actual pulmonic softening, to one of those humid, enervating, dyspepsia-breeding climates once held in high repute for the cure of pulmonary consumption of every kind and in every stage.

The object of the following pages will be to offer to the reader a few remarks on change of air as a means of preventing, alleviating, and curing phthisis, and to afford aid in forming a judgment from recorded observations and experience as to what appear to be the best conditions of climate to cure or mitigate phthisis in its various forms and stages.

In an interesting work by M. Boudin, chief surgeon of one of the military hospitals in Paris, we learn that there are countries where phthisis is quite unknown, as, for instance, Iceland; no phthisical patients are seen in Finmark; and the Swedish physicians affirm that consumption becomes less common as we proceed northward; there is, in fact, such a thing as a preventing action of the Polar regions.

In England, army statistics show that the English soldier is more often a prey to phthisis in his own country than in any other. In the United Kingdom, the Infantry of the Line lose annually by phthisis 8·9 men for 1,000, and the Guards 12·5. At Malta, the mortality is below 5 per 1,000; at Gibraltar, the Mauritius, and Ceylon, 4; at the Cape, 3; and in the Madras Presidency, 1.*

In the Navy, the general mortality from phthisis is much lower than in the Army, due probably to the preventive effect of the sea air.

With respect to the civil community of Great Britain, it may be observed that in London the deaths from phthisis are 18 per cent.; in Edinburgh, 11·9; Leith, 10·3; and Aberdeen, 6·2.

From these statistics we see that consumption is by no means a disease peculiar to cold climates.

Mr. Keith Johnson writing in the "Med. Chir. Review" for 1857, observes; that the opinion, long entertained, that phthisis is a disease peculiar to cold climates is quite erroneous, for the disease is almost unknown in the Arctic regions, Siberia, the Orkneys, Shetlands, and Hebrides.

Fuchs shows, from extensive data, that in Northern Europe phthisis is most prevalent at the level of the sea, and that it decreases with increase of elevation to a certain point. At Marseilles, on the seaboard, the mortality from this disease is 25 per cent.; at Oldenburg, eighty feet above the level of the sea, it is 30 per cent.; while at Eschevege, four hundred and ninety-six feet above the sea level, it is only 12 per cent.; and at Brotterode, eighteen hundred feet above the sea, it is but 0·9 per cent. It is calculated that in the temperate zone at least one-tenth of the population die of phthisis, and it is uniformly more fatal in cities than in the country. In England, the excess in cities is equal to 25 per cent.

* The Lancet for 1857, page 90.

Dr. Gastaldi* is another observer who bears witness to the preventive and curative influence of mountain air over pulmonary phthisis.

Observations of my own, made on a small scale, and over a limited area, confirm the above statements. First, with respect to the influence of the air of crowded cities, I have noticed in hospital and dispensary practice how, among the poorer classes, phthisis has commenced its attack soon after the individual had settled in some of the more densely populated regions of London, and I have been struck in more than one instance with the marked improvement which has taken place on the individual quitting town to go for a season into a country district notoriously damp and cold, but where the air would be purer and fresher than it could be in the courts and alleys of London.

When the remove has been to a healthy part of the country, the improvement has been proportionably much greater.

With respect to elevation of a district, I may say that I have had frequent opportunity of observing the great prevalence and rapid progress of phthisis in many country villages lying low and damp, as compared with others which are placed higher, and where consequently the air is not so stagnant and humid.

In some of the districts with which I am familiar, lying north of London, and said to be about on a level with the cross on the top of St. Paul's, phthisis is quite a rare disease as compared with its prevalence in those parts of the north-eastern, eastern, and southern districts, where the level is very much lower.

More than one instance of striking improvement in cases of unmistakeable phthisis has come under my notice in the case of persons who have removed from low-lying country districts to the more elevated situations.

When we consider that pulmonary consumption is in the majority of cases a disease of debility, and specially, as I believe, in its earliest stages of debility and exhaustion of the nervous force, we can quite understand the benefit likely to accrue to the patient from dwelling in a pure fresh air which increases the appetite and powers of digestion, stimulates the free and perfect expansion of the lungs, thus promoting the formation of healthy blood and the nutrition of the whole system.

Moreover, under such physiological conditions of existence, medical treatment by cod-liver oil, chalybeates, and

* Syd. Soc. Year Book, 1861, p. 196.

other tonics, will have far greater efficacy than it would have under other circumstances.

While thus recommending the bracing air of elevated districts as a very important item in that general tonic treatment which experience is daily showing to be the best method of counteracting the tendency to tubercular disease, it must not be understood that every kind and degree of pulmonary phthisis is to be cured by a bracing air, any more than by any regular routine of tonic medicine. In some forms of phthisis, iron is a priceless remedy; while, in others, I have seen it prove most injurious, and so that dry bracing air, which is the best of tonics for very many cases of phthisis, is absolutely intolerable to others—a matter which I now proceed to consider and illustrate more in detail.

We must always bear in mind, in dealing with such a disease as pulmonary phthisis, that we have in the first place to overcome a morbid constitutional tendency in the system; and, secondly, we have to combat the symptoms of local disease as manifested in the lungs.

The attainment of the first of the objects above named should be the aim of a rational system of medicine; and provided the actual destruction of lung substance be not great, the probability is, that in the treatment best adapted to remedy the constitutional vice, we find the best palliatives for the actual chest symptoms themselves.

The various preparations of iron, or some of the mineral acids, will often speedily cure a cough which has been daily getting worse in proportion as the stomach has been drugged, truly *ad nauseam*, with ipecacuanha, squills, paregoric, and all the whole genus of expectorants.

Expectorants and sedatives are useful, indeed invaluable, at times, as adjuvants in combating special symptoms, but daily experience shows that it is to the tonic and invigorating plan of treatment that we must look as the great method for the prevention and cure of phthisis in far the majority of cases.

Bearing in mind the rarity of phthisis, as shown by statistics already quoted, in the higher districts, we should not fear in advising that one, in whose system there are signs of incipient phthisis, should reside in what is called a bracing air, provided the situation be sheltered from the east wind, tolerably dry, and of a pretty uniform temperature.

Absence of damp is important, for, observes Sir J. Clark, “of all the physical qualities of the air, humidity is the most injurious to human life.” Forcault ascribes both phthisis and intermittents to dampness in the air, and Dr. Gastaldi bears witness to the beneficial effects of dry mountain air in cases of incipient phthisis.

The temperature of an atmosphere loaded with watery vapour will be liable to considerable variations, since aqueous vapour is the chief fluctuating ingredient in the air, and hence is by no means a safe atmosphere for the consumptive invalid.

England is not wanting in places which have acquired celebrity as health resorts for the consumptive, and I now proceed to notice some of these places and districts, and the claims they may have to such celebrity.

The south-west coast, and of this specially the south-coast of Devon has been much resorted to by invalids, and is a typical example of a certain kind of climate suitable to a certain class of chest diseases.

The climate is warm, being, on an average, in the winter, five degrees warmer than London, the air is decidedly relaxing and humid; in some parts, as, for instance, Sidmouth, it is positively damp.

Torquay is drier than any other part of the coast, free from fog, with a remarkably calm and equable air, and is in great repute as a residence for pulmonic invalids.

My own observations and inquiries lead me fully to believe in this mild relaxing air as beneficial in cases of dry irritative bronchitis, with much painful spasms of the air-tubes, coupled also with irritation of the digestive organs and harshness and dryness of the skin. In some cases of phthisis, especially among females, we find the nervous system very irritable, and the slightest change of temperature is apt to cause much pain and dyspnoea; unquestionably the milder climates relieve these painful symptoms and render life more endurable, and probably, therefore, more prolonged.

That these mild climates are not preventive of phthisis I have lately had illustration in the instances of two patients now under observation: one of these, a female, had phthisis set in with hæmoptysis, cough and emaciation while living in the south of Devon; the other, a young man, dwelling near the same locality, but no relation to the first patient, was also the victim of advancing phthisis. These two patients have now for some time been resident near London, and greatly improved, the man has notably gained in flesh and strength.

Now both these patients had been from their birth resident in a relaxing climate. While there, phthisis declared itself in a most unmistakeable way, and thus far we are able to observe, in one of them at all events, an apparent arrest of the disease by a removal north of London, exemplifying one rule of practice in the choice of a climate, to which I have always been disposed to pay much regard: it is, to

remove the consumptive patient to an air as different as possible in its characters to that in which the disease first declared itself. As we further consider and illustrate the good and bad effects of change of climate on the phthisical invalid, we shall have occasion to refer again to this rule as a guide to us in practice.

(To be continued.)

On the Induction of Premature Labour by the Injection of Tepid Water into the Uterus. By J. D. EAMES, Esq., M.R.C.S. Eng., Bourton-on-the-Water.

BELIEVING that the plan of the induction of premature labour, by the injection of warm water into the uterus, is either not generally known or not generally appreciated by the profession, and having practised it on two occasions on the same patient with the most complete and successful result, I am induced to lay a short account of the case before the readers of the "Medical Mirror," hoping that they may prove of interest.

The patient, Mrs. C., æt. 23 years, has a ricketty deformed pelvis, as I had suspected before her first confinement, but she would not submit to an examination, which I urged two months before labour set in, at which time, on my arrival, by an examination per vaginam, my fears were fully realized; the promontory of the sacrum projected so far forwards as to render the antero-posterior diameter little over two inches. In accordance with previous arrangement, I sent for Mr. Moore, who had participated in my views of the case. Turning and the forceps failing, I performed craniotomy, and Mr. Moore completed the delivery with the forceps. The recovery was somewhat slow. The patient soon became pregnant again, it and was decided to induce labour at the end of the seventh month. Fortunately a few weeks before that time I had read a paper in the "Medical Times and Gazette," describing the method of bringing on premature labour by the injection of warm water, and I determined to try it. On January 14th, 1863, I injected about six ounces of slightly tepid water into the uterus by means of an elastic catheter fixed to an india-rubber bottle with a stop-cock. The catheter was introduced through the os uteri over the anterior lip, and gently pressed forward, separating the membranes for about an inch and a half to two inches, the water was then moderately quickly

injected, and the catheter immediately withdrawn. The patient was directed to lie perfectly still for a few hours. Rigors were the first symptom that set in, coming on shortly after the injection, and then presently uterine contractions, which continued with occasional remissions for thirty-six hours, when I was sent for. I found the os uteri soft and considerably dilated and the membranes bagging down. Feeling the foetal extremities, I waited until there was full dilatation, when I ruptured the membranes and seized the feet, and very easily brought a living child into the world. It survived ten hours only.

Again, on the 25th of January last, at the end of seven and a-half month's pregnancy, I performed the same operation, and the same results followed, but more slowly, a circumstance which was attributable to mental causes. On this occasion, the extremities again presented—this I was able thoroughly to satisfy myself of on three successive days—but subsequently before the membranes were ruptured, “spontaneous evolution” took place, and the head was substituted for the feet, the labour terminating in the first position; and I am happy to say that the child and mother are doing well.

This case I think demonstrates this plan to be the most simple, safe, and by far the best—surer than plugging the os uteri, or injecting the vagina alternately with warm and cold water, as recommended by some, and infinitely safer to mother and child than puncturing the membranes, for reasons which it is obviously superfluous for me to point out.

Still more recently, in another case, I have heard of the foregoing treatment being adopted, and, as far as the induction of labour is concerned, it answered perfectly. The patient was the daughter of a surgeon, who, in corresponding with her attendant, requested him to *puncture the membranes*.



The Employment of Oxygen as a Therapeutic Agent.—The “Gazette Médicale de Paris” contains an account of the results of some very interesting experiments made with oxygen gas on man and animals, which we purpose to lay before our readers in a future number. In cases of anæmia, it is highly probable that oxygen will be found very serviceable, both in raising the patient's strength, and in counteracting the lowering effects of constitutional affections, such as syphilis, &c.

REVIEWS AND NOTICES OF BOOKS.

The Insane in Private Dwellings. By ARTHUR MITCHELL, A.M., M.D., Deputy Commissioner in Lunacy for Scotland, &c. Pp. 97, 8vo. Edinburgh: Edmonston and Douglas, 1864.

WHAT is to be done with our lunatics, where are they to be placed, and how maintained, are questions almost as difficult to answer as the kindred inquiry in reference to our criminal population. Increase your asylum accommodation, is almost as ready an answer to the one as an increase of prisons would be to the other, and if there were no interests at stake beyond those of the lunatic and the criminal, we should have an easy solution of the difficulty in the increase of our establishments; but there are other and not less important considerations involved in this question,—considerations which are daily demanding more attention, viz., the cost at which they are maintained, and the consequent burthen imposed upon the industrious tax-paying population; whilst it is unquestionably our duty to protect and provide for the insane poor, and, to the best of our ability, secure to them the means of recovering their mental health, we must be equally careful that it is accomplished at as small a cost to the public as is compatible with the attainment of the objects in view. Neither statesmen or philanthropists can altogether ignore this aspect of the question. In relieving one form of distress, we must be careful not to inflict another. The question recurs, is it not possible to maintain a large portion of our insane poor at a less cost than they are at present provided for, without thereby subjecting them to injury or depriving them of those comforts which they have a right to enjoy. Whoever has visited a large pauper asylum must have been struck with the great proportion of the inmates who are quiet and apparently harmless, and most of whom are regularly employed in some industrial occupation. If we inquire into the history of these cases we shall find that nearly all of them are incurable, harmless, inoffensive persons, who are neither dangerous to themselves or others, but simply incapable of taking care of themselves from lack of that mental capacity, which is necessary to fit them for the business of life, whatever it may be. These persons, guided by the gentle force of example and kindly supervision, perform well most of the duties required of persons in the humbler stations of life, and lead in the main a comfortable and a happy existence. When we inquire the price at which all this is accomplished, we learn that each individual costs the community almost as much as serves for the maintenance

of a family in the patient's station of life, and the thought naturally occurs to us, would it not be possible to allow these persons the enjoyment of liberty, and the community the benefit of their labour, and at the same time secure for them the same kindly supervision they receive in asylums. When we turn to the attendants who have charge of these patients, we find they are chiefly drawn from the labouring population, men or women of like habits as the patients under their charge, differing from their class only in the fact that they have received some instruction in the art of governing the sort of people committed to their care. It is true, they are assisted in this by the wise and prudent supervision of the medical officers of the establishment; but notwithstanding this, the patients are, for the most part, entrusted to their care, and they are quite capable of directing and controlling their daily occupation and conduct. Taking these facts into consideration, we cannot but think that a large number of the insane inmates of our asylums might be properly cared for, and usefully and even profitably employed, in our agricultural districts, if care were taken, in the first instance, to select suitable houses for them; and, secondly, to provide for the more or less frequent supervision of them by competent persons, who would detect abuses and offer friendly advice on their management.

We have been led to these reflections by the perusal of Dr. Mitchell's work on "The Insane in Private Dwellings." The author has brought together a large collection of facts bearing on the question, and many useful suggestions, which, coming from so able and experienced an authority, are deserving of every consideration. Although the work before us contains accounts of many cases of cruel neglect and harsh treatment, yet there is a bright side to the picture, and we have numerous examples showing, not only how much may be done by the friends of this class of sufferers, but how much really is done by well-directed kindness, and how much of the improper treatment of others is due to ignorance, rather than to neglect, or intention, and how readily it is improved by the judicious advice of those intrusted with the visitation of this class of insane poor. He says:—

"In all countries and at all times there has been a large number of the insane thus provided for, and so in the future it will continue to be. It would require the most stringent enactments, and would involve the country in a ruinous expense to make it otherwise; and besides, it would be difficult to make it appear even as probable that the doing so would serve any good or humane purpose. Indeed, 'that all cases of insanity should be placed in asylums, is a proposition not to be entertained.' The welfare of the patients would not be thereby promoted, while the expense to the country would be vastly increased.

"If then they are not to be placed in asylums, how are they to be disposed of, so as to obtain for them a fair and proper protection, and at the same time make the burthen of their maintenance lie as lightly as possible on society, due regard being had to the patient's well-being? In my opinion, proper treatment can be found for a large number in private houses; and so far as the teaching of my observation and experience goes, the actual number of patients so disposed of could be considerably increased with advantage both to the insane themselves and to the public who support them."

Of the soundness of this opinion a somewhat lengthy period of observation has satisfied us, and we believe that it affords, if rightly carried out, the best method of meeting the constantly increasing want of extended accommodation for lunatics. More than this, it would tend to promote amongst the poor that self-reliance and sympathy for the afflictions of their relatives which their removal to asylums tends to diminish.

Dr. Mitchell's work treats the subject fully, and is a valuable contribution to our knowledge of the subject on which he writes—a subject of considerable interest and importance to those whose object is the promotion of our social welfare.

SYPHILOGRAPHY.

1. *The Modern Treatment of Syphilitic Diseases, both Primary and Secondary: comprising the Treatment of Constitutional and Confirmed Syphilis by a safe and successful Method; with numerous Cases, Formulæ, and Clinical Observations.* By LANGSTON PARKER, F.R.C.S., late Surgeon and now Honorary Surgeon to the Queen's Hospital, Birmingham, &c. Fourth Edition, entirely re-written, pp. 403. London, Churchill, 1860.
2. *Lectures on Syphilitic and Vaccino-Syphilitic Inoculations, their Prevention, Diagnosis, and Treatment. Illustrated by Coloured Plates.* By HENRY LEE, F.R.C.S., formerly Surgeon to King's College Hospital, Senior Surgeon to the Lock Hospital and Asylum. Second Edition, pp. 335. London: Churchill, 1863.
3. *On the Treatment of Syphilis and other Diseases without Mercury; being a Collection of Evidence to prove that Mercury is a Cause of Disease, not a Remedy.* By CHAS. R. DRYSDALE, M.D., M.R.C.P., &c., Physician to the Farringdon Dispensary. Pp. 133. London: Baillière, 1863.

MR. LANGSTON PARKER has so long been recognized as a leading authority in this country upon the subject of syphilis,

that it will be unnecessary for us to say more in favour of the last edition of his work, containing (as it does) the results of twenty-five years' special observation and experience, than that it is entirely and carefully re-written, with numerous important additions to the text; and that, while engaged in the elucidation of his own views, the author has not omitted to place in a fair light those of other writers, whose opinions happen to be opposed to his upon various points connected with the pathology and treatment of syphilis.

In the first chapter, he enters upon the question of the simple or non-mercurial treatment of syphilis. This method consists in the removal of all the local and constitutional irritation which accompanies a venereal sore, and is especially indicated when a soft chancre, secreting an abundant amount of pus, and free from an indurated base, is present. The patient is to be placed on a properly regulated, but not necessarily low, diet; to be kept in bed, or, at any rate, in the recumbent posture; the ulcers are to be destroyed by caustic; and aperients, alteratives, and opiates are to be given internally, according to the requirements of the case. In this manner many cases may be doubtless cured. Attention to diet is a point of special importance, and in some northern countries of Europe venereal diseases are treated systematically and successfully by a dietetic regimen, to which the name of "*cura famis*" is given, the only medicines administered being the extracts of bark and conium. This non-mercurial treatment may be resorted to both in the primary and secondary forms of syphilis, but the former is that in which it is most likely to be followed by success. The fact should not be lost sight of, that in a large proportion of the cases treated in this way, the cures are more apparent than real, and the patients are liable to relapses upon resuming their usual habits. Still, mercury may be dispensed with in many instances; and Mr. Parker states that, as a general rule, he never employs mercury, excepting as an aperient, in the earlier stages of primary sores, and that it is not until the simpler remedies just referred to have failed, that mercury should be resorted to.

He considers that mercury is indicated when the primary sore is indolent, with a hardened base, and difficult to heal; and also when secondary symptoms appear before the primary sore has healed. Some surgeons think that the test of induration is insufficient to show distinctly the difference between an infecting and a non-infecting sore; but the author believes that it is conclusive, particularly when the state of the glands in the groin, which are usually

hardened and inflamed in the former case, is taken into account. We may here mention that Mr. Henry Lee, whose researches Mr. Parker frequently refers to in a manner which shows considerable coincidence of opinion, and a total absence of the petty jealousy which not seldom disgraces the pages of special treatises, has shown the great value of the microscopic appearance of the matter secreted by the sore as a diagnostic test. In the case of a simple, suppurating sore, pus-globules will be found in the secreted matter, but these are absent in the secretion taken from an infecting chancre. Mr. Lee further makes this characteristic a test of the advisability of the exhibition of mercury, and he usually gives mercury when no pus-globules can be detected, but not when they are present, as it is presumable that no secondary symptoms will occur in the latter class of cases. The terms "infecting" and "non-infecting" are used, it may be observed, with reference to the effect upon the system of the patient, and not as regards the transmission of the disease from one person to another.

If the use of mercury be decided upon, the next question is how it is to be employed. This may be in three ways;—by internal administration, by friction, or by moist fumigation. Mr. Parker has only a very limited faith in the value of mercury given internally, and says, that he "never depends upon it alone, unless combined with the moist mercurial fume." This sentence is incorrectly worded, for a plan cannot be said to be depended on alone, if it be followed simultaneously with another method of treatment; practically, however, the author is right, and the profession owe a debt of deep obligation to him for the improvement which he has effected in this department. He has a better opinion of the treatment by friction, which consists in rubbing a scruple or more of the stronger mercurial ointment into the axillæ, the inside of the thighs, the popliteal spaces, or the soles of the feet. These frictions are directed to be continued every night, or every other night, until the gums swell, and the secretion of saliva is slightly increased; and the inunction should be kept up for some time after the sore has healed, and its specific induration has gone. The third plan, that of moist mercurial fumigation, receives the strongest amount of praise from the author; it is, in fact, the method specially referred to in the title of the book. We have repeatedly seen cases in which the successful results obtained by the fumigation system fully carried out all that he says in favour of it. It is not only efficacious in suitable cases, but safe, and is rarely accompanied by salivation, which is prevented by the profuse sweating which the process occasions.

In a subsequent chapter, Mr. Parker points out the difference between simple and specific balanitis, a point upon which much often depends, as regards the happiness of individuals and families, and which is consequently of no small importance. The treatment of simple balanitis is very easy: cleanliness, astringent lotions, aperient medicines, and rest, with regulated diet, soon bring about a cure. When the affection has a venereal origin, the treatment assumes, of course, a specific character.

The numerous causes which produce urethral discharges are well described in the chapters on gonorrhœa. The most common of all is direct infection with the gonorrhœal virus; but it is also certain that inflammation, with muco-purulent discharge from the urethra, may result from the action of the discharge in various forms of disease, such as vaginitis, profuse lochial discharge, fluor albus, non-syphilitic ulcerations, secondary syphilis, and ulceration of the os uteri. Urethritis may even be due to causes apart from sexual intercourse, of which habitual costiveness, inflammation of the prostate gland, stone in the bladder, hæmorrhoids, and the excessive use of fermented liquors, or of food highly seasoned with pepper, furnish occasional examples.

Gonorrhœa is divided into four stages, which occur with more or less regularity. The first is marked by slight swelling and adhesion of the lips of the meatus urinarius, with slight discharge of adhesive muco-purulent matter; this lasts from 2 to 48 hours. In the second, or inflammatory stage, there is heat and pain in micturition, swelling and redness of the part, with a purulent discharge; this form may last from 7 to 21 days. The third stage is characterised by discharge without inflammation. In the fourth stage, usually termed gleet, the general inflammatory symptoms have entirely disappeared, and the discharge becomes very scanty, being lessened to a few drops only during the day.

In the first stage the "abortive" plan of treatment, which is so called from the object in view, which is to cut the attack short, may be resorted to; but to ensure any certainty of success, it must be adopted within the first 24 hours from the beginning of the affection. This plan consists in the use of injections and the administration of full doses of purgatives, or of fresh cubebs or copaiba. Mr. Parker is in the habit, if applied to for advice sufficiently early, of recommending complete quiet and very low diet for the next 24 hours, with the use of a weak injection of sulphate of zinc (half a grain or a grain to the ounce of distilled water), diacetate of lead (two to seven grains to the ounce), or nitrate of silver (in the proportion of half a grain to the ounce), and a dessert-

spoonful of freshly ground cubebs to be taken every 3 or 4 hours. "This plan," he observes, "very commonly succeeds, if the patient is in a condition for its adoption; and it is perfectly safe, and does not aggravate the succeeding stages, should it not succeed." He altogether objects to the employment of the strong injections used by some surgeons, and says that, in addition to the severe pain produced by them, which is the lesser evil, he has often known cases where they laid the foundation of organic stricture, or of pains and discharges from the urethra, affecting the patient for many years, or sometimes for his whole lifetime. Besides these serious drawbacks, the use of too powerful injections often fails in its immediate object, and then prolongs the subsequent stages of the complaint, which it renders more severe. Instances have even been recorded in which it was followed by a fatal termination. The practice of giving large doses of copaiba during the inflammatory stage of gonorrhœa is highly reprehensible, and is apt to produce very intractable incontinence of urine.

In the second stage of the disorder, when the inflammation runs highest, neither injections nor specific remedies should be used, generally speaking, but a strictly antiphlogistic treatment should be adopted. Aperients, alkalies (chiefly the preparations of potass and soda), restricted diet, the warm bath or fomentations, complete rest, and sometimes local bleeding, by means of leeches to the perineum, are indicated in this stage.

When the inflammatory symptoms have been subdued by these measures, it is usual to resort to another plan of treatment, termed the "revulsive," in order to complete the cure. Remedies are administered which, by the production of a specific action on the mucous membrane of the urethra, are supposed to supersede that of gonorrhœa; those most frequently employed with this view are copaiba, cubebs, turpentine, various preparations of iron, cantharides, and different weak injections, of which those which contain sulphate of zinc, or diacetate of lead, are considered as the best by the author. In some cases, particularly when the affection has passed on to gleet, the introduction of bougies, either simple or smeared with some kind of ointment, is useful. Their use is especially attended with benefit if the gleet is complicated with stricture, or an uneven state of the lining membrane of the urethra, in which condition the lacunæ continue to be the seat of the disease, notwithstanding the use of injections. The bougie should be of middling size, as it is of no use if too small, and is injurious if too large; it should moderately distend the urethra, without unduly stretching it, and it

should be allowed to remain in the urethra until some degree of irritation is set up. Blistering to the perineum and penis has been employed with a variable amount of success. The author speaks highly of the administration of a combination of iron and copaiba in gleet; but the affection is usually troublesome to cure, and no remedy can be depended upon in all cases to the exclusion of others.

The various diseases which complicate or supervene upon gonorrhoea should be carefully watched for, and judiciously combated as soon as they show themselves. Strictures should be treated, at their commencement, by the occasional passage of a bougie, with a view to the prevention of thickening of the mucous membrane and contraction of the urethra, and to the promotion of the absorption of any deposit which may have been effused. Frequent or difficult micturition, particularly when attended by much pain and tenderness of the prostate gland, and by sanguino-purulent urine, must be treated by the application of leeches to the perineum, full doses of opium, the warm or hip-bath daily, warm fomentations and poultices to the perineum, enemata of warm water or castor oil, rest in bed, low diet (the patient being restricted to broths), and the administration of alkalies with hyoscyamus and belladonna. When gonorrhoeal rheumatism manifests itself, colchicum, camphor, or opium, should be combined with the patient's medicine, and the warm or vapour-bath should be used. Gonorrhoeal ophthalmia is always a serious affection, and demands prompt treatment. Antiphlogistic and sedative remedies should be resorted to (the question of blood-letting is still *sub judice*), and when the general inflammatory symptoms have been subdued, local astringent lotions must be applied to the eye. Some preparation of belladonna should be employed topically, in order to obviate the tendency to adhesions of the iris, which, in common with the other deep-seated structures of the eye, is liable to become affected. When the iritis is marked, it must be treated in the ordinary manner, the exciting cause being kept in mind. Orchitis should be treated antiphlogistically, and fomentations of hot water, or decoction of poppies, should be frequently used, and the bowels be kept open by castor oil or saline aperients. When the acute symptoms have almost disappeared, compression of the testicle by strapping is generally very efficacious.

Whether the theory of the unity, or that of the duality, of the syphilitic virus is correct, there can be no doubt upon one point, viz., that two great classes of primary syphilitic sores are met with in practice, widely differing from each other as regards appearance, symptoms, and complications; one, the

simple, soft, or so-called non-infecting chancre, and the other, the specifically indurated, infecting sore.

The history of the case, the position and appearance of the sore, and the state of the inguinal glands, commonly settle the question whether a sore is of venereal origin, or not; but, in some cases, the test of inoculation is the only means of arriving at a perfect diagnosis.

The *abortive* treatment of a primary syphilitic sore consists in its early destruction by the application of caustic, in which way the disease may be eradicated at the outset, and the risk of constitutional taint be almost entirely removed, but this treatment must be resorted to at an early period of the affection; according to Ricord, not later than the fifth day from the exposure to contagion. Professor Sigmund, of Vienna, quoted by Mr. Parker, says that in 1,000 cases, he has known but two in which secondary disease occurred where the chancre was destroyed before the fifth day. Nitrate of silver is not a sufficiently powerful caustic, and often causes much inflammatory swelling and pain, and the author consequently prefers strong nitric acid, the acid nitrate of mercury, or potassa cum calce. Each of these requires considerable skill and caution in its application, and the after-dressing is of much importance.

Chancres are occasionally situated in the urethra, their most frequent seat there being the fossa navicularis. The only disease for which chancre in this part is likely to be mistaken is gonorrhœa, from which the history of the case, the nature and amount of the discharge, and the presence of a distinct circumscribed induration in some part of the urethra, most usually just behind the glans penis, will serve to distinguish it. The prognosis of urethral chancres is sometimes unfavourable; Ricord has shown that they may end fatally by extension to the bladder, and grave local lesions, such as ulceration and perforation of the urethra, are not unfrequently produced. Owing to their peculiar situation, urethral chancres cannot be treated by the direct application of caustic. The inflammatory symptoms must be subdued by antiphlogistic measures,—low diet, rest, diluent drinks, and purgatives, with soothing injections; subsequently, the injections of any of the lotions used in treating external chancres may be resorted to.

In the first stage of bubo, it is very desirable to disperse the tumour, if possible. If the inflammatory symptoms are strongly marked, we may attempt to obtain this result by complete rest, tartar-emetic, local bleeding, the application of cold lotions, and even of ice; if the inflammation is slight, rest and compression of the bubo may be tried, an antiphlo-

gistic regimen being directed at the same time. If chronic enlargement remains after the dispersal of the tumour by these means, frictions, with iodine in the form of ointment, or solution, are useful. When fluctuation is present, and the skin over the tumour has become thin, it will be best to open the bubo, either by the knife or by caustic, instead of losing further time in attempting to procure its resolution. If the former method be adopted, Mr. Parker prefers to make several small punctures, out of which the matter can drain, instead of too free an opening; when the abscess is nearly empty, he injects a very weak solution of sulphate of zinc into the cavity, and afterwards applies pressure by means of a compress of lint and a bandage. If the skin be very thin, and the quantity of matter large, the bubo may be opened by passing through it a fine seton, consisting of four or five threads, which should be allowed to remain two or more days. Opening by caustic is preferable when the skin over the bubo is of a deep blue colour, and gangrene is impending, or when the integuments are so thin and disorganised that it will be impossible to save them. The manner in which the opening is to be accomplished is described at some length in Mr. Parker's book.

The very important subject of secondary or constitutional syphilis is fully considered in the second half of the volume. If the measures employed for the purpose of preventing the absorption of the syphilitic virus into the system be insufficient, we get a well-known series of morbid phenomena, affecting the skin, the mucous membranes, the eye, the bones, and the viscera. Besides this cause others may produce constitutional syphilis; these are inoculation or contagion, *i. e.*, the direct communication of secondary syphilis from a diseased to a healthy person, without the intervention of any primary disorder; hereditary transmission; the imperfect treatment of the primary disease; and a peculiarity of constitution, predisposing to the constitutional form of the affection.

In due succession the author gives an able account of secondary syphilitic diseases in various parts of the body, concerning which much interesting information will be found in the chapters devoted to them; but we must pass on to the chapter in which the author describes the treatment of syphilis in infants, pregnant women, and wet-nurses. It has been urged by some writers that a mercurial course predisposes a pregnant female to miscarriage; but Mr. Parker states that this view is incorrect, and that it is much better to attempt to cure the syphilis than to postpone the treatment until after delivery, as the danger of abortion is not

increased by the specific treatment; while it is evident that the sooner the mother is cured, the greater will be the chance of the birth of a healthy child. Frictions of small quantities of mercurial ointment into the axillæ, as spoken of in an early part of this notice, and the mercurial vapour-bath are recommended by Mr. Parker, as being more efficacious and safe than the administration of mercury; in the advanced stages of pregnancy, he thinks that the treatment should be confined to frictions only. In syphilis in infants the use of mercurial ointment appears to be the best method of specific treatment.

One of the most complete chapters is that in which the author describes the principal remedies for constitutional syphilis. Foremost of all, he places the mercurial moist vapour-bath, which combines, in fact, mercurial fumigation with the ordinary vapour-bath. Mr. Parker's experience of this remedial agent, which has met with the marked approval of almost every modern writer on syphilis, is most satisfactory; and he says that he has often found it succeed, after every other plan of treatment had failed. He is of opinion, however, that these baths should be associated with suitable internal treatment; one great advantage of the mercurial vapour-bath is that, if the administration of mercury be determined upon, simultaneously with its use, one-half of the quantity which would otherwise be required of this remedy, will suffice to complete the cure, without injury to the patient's constitution. The author opposes the statement which has been made that iodide of potassium is as efficacious in the treatment of primary, as it is in that of secondary, syphilis, and upon this point he quotes Hanck and Kluge, who have given the results of four hundred cases of primary syphilis in which the iodide of potassium had little or no effect.

Before taking our leave of Mr. Parker's book, we must not omit to mention that it abounds with clinical cases, illustrative of the different forms of venereal disease, and of the treatment appropriate to each.

It is now about ten years since Mr. Lee promulgated his doctrines regarding the modes of origin of the two most important varieties of syphilis, the infecting constitutional, and the non-infecting local; an inflammation of an adhesive character ushering in the former, whilst the latter is attended by inflammation of a suppurative type. In this new edition of his lectures he reiterates these doctrines, with fresh examples and illustrations, bearing upon the highly important subjects of syphilization and of vaccination, in reference to the transmission of syphilis from a syphilitic to a healthy

constitution. The opinions which he expressed in his earlier writings have been confirmed by the later experience of himself and others.

In a short introduction, Mr. Lee notices four principal effects of syphilitic inoculation, viz., 1. Adhesive Inflammation; 2. Absorption; 3. Suppurative Inflammation; 4. Mortification. The body of the work consists of sixteen Lectures. The first Lecture gives, in historical order, an outline of the opinions prevailing at different periods; including those of Hunter, Swediaur, Ricord, and other eminent writers. The author remarks that there may be distinct processes without distinct poisons, although from their effects we see three morbid series of actions resulting—the infecting sore, the non-infecting sore, and gonorrhoea—now known to be not the same poison. He further demonstrates that the pustule is specific, easily transferrible from one part of the body to another, from one person to another, and that it appears in the neighbouring glands, but does not re-appear in the constitution.

In his second Lecture, the author enters upon the subject of syphilitic infection, and the varieties of the external appearances, including the Hunterian chancre, with its characteristic induration, and secretion, containing epithelial debris, but never purulent, unless by accident, and requiring a period of incubation of several weeks, except in cases of re-inoculation. This re-inoculation was stated by M. Clerc to be incapable of being effected; but the correctness of this view has been tested and proved by Mr. Lee, in the wards of the Lock Hospital; and he has demonstrated that the auto-inoculability is evidence of its non-infecting character, in a paper published in the “British and Foreign Medico-Chirurgical Review” for 1856. This is only to be understood, however, with the reservation, that in the earliest stages, before the specific induration has appeared, the adhesive disease may be inoculated; and more often, because of its latent character, infects the lymphatic glands. With the suppurating sore this being the exception, with the adhesive the rule; and many glands being often affected, there results the multiple indolent bubo, an almost certain sign of constitutional infection. The glands being generally hard and distinct, our author describes the amygdaloid affection of the inguinal glands. In a certain proportion of cases, however, they do suppurate, and this may often be attributed to a two-fold inoculation, of the purulent and adhesive kinds, having taken place. The most remarkable point with the glandular infection, in both kinds, seems to be, that it does not go further than the glands first in order. These do not

transmit the disease further, at any rate by the medium of the lymphatics: if the disease proceed further, it must be by means of the blood which is circulating in the gland. The specific adhesive character of the infecting sore is communicated to the specially adhesive secondary inflammations of the iris, skin, and bones. The opinion generally prevailed at one time, that cauterization would eliminate or neutralize the syphilitic virus, but this evidently could answer no good purpose in the case of the adhesive sore, because by the time any disease makes its appearance, after the necessary period of incubation, the constitution will have come under the influence of the poison. With the suppurating sore, the case is different.

The author next discusses the subject of syphilization, and remarks that the discrepancies as to the stated results from frequent inoculation arise principally from the distinction between the infecting and the non-infecting forms not being always properly recognized. Bearing this in mind, when we are told, in the account of Sperino's experiments in syphilization, that in no case secondary affections recurred after repeated inoculation with the syphilitic virus, the author thinks that the assertion is too sweeping. Professor Boeck, of Christiana, who is an advocate of syphilization, even goes so far as to say, that in this method of cure we have "an invariable law of nature." Mr. Lee's opinion is, that a very large proportion of the cases experimented upon were of the non-infecting kind; and to the dogma that repeated inoculation cures by saturating the system with the poison, he offers the objection, that under that supposition the symptoms might be expected to become worse instead of better. Experimental syphilization has been resorted to, in order to test its effects on leprous patients, and one case which Mr. Lee quotes singularly illustrates his views; it is that of a leper who had 400 inoculations without any constitutional effect resulting, until having become accidentally inoculated with the secretion from an indurated chancre, secondary syphilis followed. This showed that the previous inoculations had afforded no protection whatever against true syphilis. From *à priori* considerations, we see no objection to the theory, that inoculation, by saturating the system with syphilis, in the same way that it saturates it with variola, may furnish a safeguard against future attacks from the specific exciting cause; and it would seem to be borne out to a certain extent by what we know regarding the mitigation of the disease in modern times; particularly among the lower classes of patients who came under the care of Mr. Rose and the military surgeons, who first advocated the

non-mercurial treatment, and among the South-European nations, who at former periods were decimated by this pestilence. This is a problem that time and extended observation alone can solve. Many interesting details are given respecting this method, in its application to man and the lower animals, illustrated by plates, to which we must refer the reader, as well as to the summary of the doctrines held in the last and present centuries on the subject of lymphatic absorption. Among the results of the author's own observations, is this, that of seventy-six consecutive cases of suppurating bubo, seven only had secondary symptoms; and he accounts for this fact principally on the supposition that there had been previous infection; and of thirty-one consecutive cases of secondary syphilitic eruption only one could possibly have had any relation to a suppurating bubo. Hence he enunciates the proposition "that the chances of infection of the system in cases of syphilis are inversely in proportion to the degree of irritation and inflammation of the absorbent vessels leading from the primary seat of disease;" and, further on, he says, "I have not been able hitherto to find a single unequivocal case, in which a primary suppurating sore had clearly given rise to a suppurating bubo, and at the same time to constitutional syphilis."

We can only allude to the subject of the fifth Lecture, viz., destructive and suppurating syphilitic sores, their nature and treatment. Generally speaking, mercury used internally is not required, but in some forms, as well as for the local treatment of primary sores, it is desirable.

Mr. Lee furnishes an able abstract of all that is known regarding the introduction of the syphilitic virus, by vaccination, into the healthy constitution. If there should have remained any doubts as to the possibility of this infection, they must be removed by the complete history given by the author of the catastrophe at Rivolta, in 1861, when, through the medium of one child, who can be proved to have been exposed to the influence of constitutional syphilis, the disease was transmitted to about eighty inhabitants of a small village, including children (some of whom were unvaccinated), mothers, nurses, and fathers. Our author endorses in a lengthy and clearly-written statement the conclusions arrived at by the Italian Committee, presided over by Dr. Pacchioti, which was appointed to investigate this subject. The author's remarks on vaccino-syphilitic inoculation, as well as on the evidence for and against the communication of secondary syphilis, by other modes of inoculation, and by the agency of the blood or of foul animal secretions, are well worthy of perusal.

The eleventh Lecture treats of the effect of hereditary

transmission of disease, in promoting or negating the reception of syphilis. The author's opinion is, that the fact of a system being tainted by syphilitic degeneration, is more or less a safeguard against fresh imbibition of the poison. It will be for the reader to weigh well Mr. Lee's views and facts. Can it be that the disease and the individual can both degenerate, the result being that a previously syphilized person is spared the effects of a scourge, potent only among the robust, and hitherto uncontaminated? Certainly this view may derive confirmation from the fact that whenever, like small-pox and the exanthemata, syphilis has been introduced among a fresh community, as the Red and Black Indians and the Polynesians, it has caused awful ravages for a limited time, after which the virulence of the epidemic has become diminished. The author next treats of re-infection and the transmission of secondary syphilis. It is now a known fact, that sexual intercourse is not absolutely necessary for infection. The use of the same bed, the same utensils, and similar circumstances, may cause it.

Mr. Lee's description of constitutional syphilis does not materially differ from that which has already appeared, from his pen in the first volume of "Holmes's Surgery." It contains an admirable summary of what is known on the subject, as well as of his own experience and practice. He remarks that the so-called tertiary symptoms, affecting the skin, bones, tissues, and internal organs, may in point of time precede the so-called secondary symptoms. He gives a full description of syphilitic iritis—a disease demonstrating the specific adhesive type of syphilis. It has generally been thought that this affection may be diagnosed by the appearance of the circum-corneal inflammation, and the character of the deposits on the iris; but from an extended experience on this head, we are decidedly of opinion, that there is nothing that can be called pathognomonic in syphilitic iritis. We look upon it simply as an example of the most severely acute form of the disease. At the same time, we may say, that we know of no means of curing it effectually, but by the internal administration of mercury. We have often tried iodide of potassium, turpentine, and other remedies, but we have confidence only in mercury to promote absorption of the effusion and to preserve the sight. The question may arise, whether it is advisable, in certain peculiar cases, to effect those ends at the probable expense of the constitution. To this it may be replied, that it is not necessary that salivation should be induced, in order that a cure may be effected.

In his concluding Lecture, Mr. Lee treats of the different

methods of bringing the system under the action of mercury. Like most surgeons, he looks upon mercury as the sheet-anchor in the treatment of constitutional syphilis, and he does not think it necessary to take up much of the time and attention of his readers by discussing whether it is necessary or not. He says, indeed, at page 218, that the non-mercurial practice of Rose and other army surgeons was found inefficient; but he believes it of more importance to point out, how we can avoid the evils, such as irritation of the chylo-poietic organs, cachexia, &c., which mercury undoubtedly causes in many cases, than to recapitulate the arguments *pro* and *contra*, upon the desirability of using mercury as a remedy. Introduction by the stomach and by inunction into the skin are both inconvenient and often inefficacious; and Mr. Lee states that for these reasons the use of mercury internally has, for several years past, been abandoned at the Lock Hospital in his practice. He points out the calomel vapour-bath as the means by which the system can be brought under the specific effects of mercury, mildly but efficaciously. Out of a vast number of cases treated by this method in the Lock Hospital, signs of a troublesome salivation, which appeared to him easily accounted for, presented themselves in one instance only. Nothing beyond slight mercurial affection of the gums need be caused, nor is it desirable for the purpose of effecting a cure. Only a small quantity of the drug is found requisite, the digestive organs are not irritated, and the free action of the skin, while it moderates the mercurial action, also much facilitates the elimination of the syphilitic virus from the system. The other methods of treating both constitutional and local syphilis are all lucidly described by Mr. Lee. In fact, this volume of Lectures, illustrated as it is by excellent coloured engravings, and containing a record of the experience which few can have enjoyed in the same measure as Mr. Lee, forms a complete manual on the subject of which it treats.

Dr. Drysdale's work is one altogether of different character from Mr. Parker's or Mr. Lee's, and, we may say, is written on a different subject, although syphilis figures prominently in the title of the book. It consists chiefly of a collection of a great amount of evidence to prove that neither syphilis, nor any other disease, can be cured by mercury, but, on the contrary, must be aggravated by its use: in effect, that mercury is not a medicine but a poison. As a poison it can only do harm, and especially is it is productive of injury in constitutions which have already been subjected to the lowering influences of syphilis. This is virtually the statement made by Dr. Drysdale. He has placed mercury in the criminal's

dock, counsel have urged all the arguments that are capable of being brought forward for and against it, and the author, putting himself in the position of the learned judge, sums up the evidence, and waits, with society in general, for the verdict to be pronounced by the jury. The jury comprises all the enlightened members of the profession, inclusive of the special practitioners in syphilis, whose opinions naturally must have great weight with the ordinary members of the body. The counsel retained for the culprit are very numerous, and comprise among other representative names, those of Astruc, Hunter, Bell, Pearson, and Ricord. The counsel for the prosecution are not so numerous, but amongst them are included such men as Dr. W. Fergusson, Hennen, Guthrie, Rose, Thompson, Syme, and Desruelles. The judge gives his opinion that no more evidence against the culprit is wanting; in fact, that it exists already to an overwhelming extent; "that mercury was introduced at first needlessly into the practice of medicine as an internal remedy, and that it now holds its place among the list of remedies solely from its having been used by the practitioners of the past without any sufficient evidence that it is ever of the slightest service." In his own experience, Dr. Drysdale states, that he has "never seen syphilis assume any very grave secondary or tertiary forms, except when courses of mercury have been employed;" and his "aim has been to lay, in an accessible form, before the mass of the profession, the evidence which has convinced himself." The author looks upon mercury, which he considers as a poison when given in syphilis, as no less hurtful and unnecessary in all forms of disease, acute or chronic. Consequently, he wonders at the unhesitating faith many medical men even now have in its efficacy, as is demonstrated most notably by their allowing themselves to be put under its specific influence for various diseases; although, as he thinks, they have had abundant opportunities of observing that it destroys tissues, induces phthisis and other cachectic states, abortion, palsy, amaurosis, mania, and premature death.

In the first chapter the author quotes from Mill's "Logic" the arguments as to the difficulty of arriving at correct conclusions on this very point, the influence of mercury, and the various fallacies attending the methods used, even of experiment and observation. Mr. Mill seems to think that a correct judgment is more likely to be attained by the deductive or *à priori* method, and readily appropriates to this subject the maxim "experience is fallacious, and judgment difficult." It would seem, however, that the same kind of experience which has tested and proved the virtues of mercury in syphilis, has also, in former days, tested and proved them, to the satisfac-

tion of men of the highest reputation, in scofula, cancer, and most of the dyscrasiæ. Dr. Drysdale next treats of the use of the drug in disease in general, and instances its inutility and often injurious effects in such diseases as pleurisy, rheumatism, and pericarditis, on the authority of the observations, of Hughes Bennett, Hennen, Skey, Habershon, and others.

He makes some remarks on animal poisons, including those present in the exanthemata, to which he likens syphilis, and suggests that its external manifestations are but the means employed by nature to eliminate the poison, and therefore that a mineral drug cannot be required to perform the same function.

In the fourth chapter the author enters upon the history of the treatment of syphilis before the times of Fergusson, Hennen, Rose, and the military surgeons who practised during and soon after the Peninsular war. The summary of the opinions held by the ancient (including Celsus and Galen) and modern authors, will be found interesting. It seems certain that the ancients recognised venereal ulcers, but were not acquainted with the fact, that the virus might be productive of constitutional disease. He cites Hunter, Bell, and Pearson, as giving abundant evidence against their own theories, as to the advantages of mercury. It is undisputed that the disease is not in the present day attended with the dreadful results of former ages. Some think that the violence of the poison has naturally abated; but the author attributes the change to the modern modified use of the drug, and the extension to this disease, of the rational treatment applied to other diseases. Others, as Dr. Meryon, in his "History of Medicine," perversely, as our author would say, attribute the fact, to the good effect produced on the human constitution by the heroic treatment adopted in former times.

He next details the experience, especially of army surgeons, gained since 1812; and quotes, among other evidence, the observations of Dr. W. Fergusson, in Portugal, that the Portuguese troops suffered very little with non-mercurial treatment, from secondary symptoms; whilst the British troops suffered severely, and even underwent horrible mutilations, with the orthodox mercurial treatment. Does not this tend rather to show the difference in type of constitution between the English and Portuguese, than to prove the injurious effects of mercury? By the way, with reference to the non-mercurial practice of Mr. Rose, Surgeon to the Guards,—also quoted by Dr. Drysdale,—it is stated in Mr. Lee's Lectures, that it was not found to answer among the officers of the army, and the public generally, although it seemed to

do so among the men. Then comes the anti-mercurial evidence of Hennen, Guthrie, Thompson, Desruelles, of the Val de Grâce Hospital, and others. It is stated, that the two brothers Desruelles collected the records of about 25,000 cases, and among the conclusions they arrived at were, that the proportion of relapses after mercurial as compared with non-mercurial treatment, was as three to one; and that where the mercurial treatment did not induce the troublesome secondary symptoms, it aggravated them. To this is added the experience of Fricke, of Hamburgh, who relates a very remarkable case, that of a young woman who had frequently used mercury, and who died twenty-two days after a protracted course of mercurial friction; on boiling some portions of the thigh bones and tibia for an hour in water, somewhat more than half a drachm of mercury was obtained from them. Then follows the testimony of Strunz, and Oppenheim. So strong, by this time, was the feeling against mercury, that our author seems to think the question bid fair to be decided; when, in 1838, M. Ricord began his professional career. From that time commenced another mercurial or reactionary period. Ricord, and his followers, do not go to the whole length of Hunter's practice, but they have (says Dr. Drysdale) been so thoroughly imbued with the notion that mercury is the only remedy for averting the consequences of the indurated chancre, that infinite mischief has been the result. Further on, the author gives an additional amount of anti-mercurial evidence.

When we consider that the author has written with a very strong bias, and, indeed, with an assured conviction, that one side of the long disputed question is quite right, and the other side quite wrong, we think that his summing up is as fairly, as it is ably, expressed. The subject on which he writes is one of vast importance, and increasingly so, as syphilis appears to have become more common in the army and navy. But we suspect that the time has hardly yet arrived for a verdict to be arrived at which will be universally accepted as decisive in this matter. Each practitioner will be inclined to carry out his own indications of treatment, worked out in his mind through the process of deduction, and, for their accuracy, will appeal to his own experience, acquired at much pains by the inductive method. Not the less, however, are we indebted to Dr. Drysdale for his able attempts to throw light upon a still obscure, and we might add melancholy, chapter in the volume of human nature.

Special Therapeutics: An Investigation into the Treatment of Acute and Chronic Diseases by the Application of Water, the Hot-Air Bath, and Inhalation. By J. C. LORY MARSH, M.D., M.R.C.P. Pp. 132. London: Hardwicke.

LIKE many authors before him, Dr. Marsh has been somewhat unfortunate in the selection of his title, for it is difficult to understand why the three remedial measures which he describes should be singled out from a crowd of therapeutical agents, and dignified by the designation of *special*. The question of the title of a book is one of no small importance, and has both its serious and its ludicrous aspects,—serious, when the interests of the author are affected through his book not going off the publisher's shelves, owing to its being overlooked, through its imperfect title, by the class of readers for whom it is intended; and ludicrous, when we find the "Diversions of Purley" inquired for under the idea that it is a book upon games; or, to give an instance from medical literature, when it is supposed that an excellent course of lectures, recently published under the name of "The Renewal of Life," is either a religious essay, or a treatise on artificial manures.

In the work itself, however, Dr. Marsh fully redeems the error just alluded to, as he writes with a degree of moderation and freedom from exaggerated praise which is rare amongst authors when engaged in the description of methods of treatment for which they have a partiality. Dr. Marsh thus gradually excites the reader's interest in the subject, instead of making him feel that, whether he be willing or not, he is expected to agree, without hesitation or demur, to everything that is said.

The therapeutic agent which the author places first is one of undoubted value, if used to a proper extent only. In fact, were it not for the revulsion of opinion produced by the absurd lengths to which hydropathic practitioners go, pretending to have discovered a universal panacea for all disorders, we believe that water would stand in much higher estimation, remedially speaking, than it at present does. In scarlet-fever, affusion with cold water, or simple sponging of the body with it, is often beneficial, although in this, as in all other affections, its employment should not be resorted to without the sanction of the medical adviser. The application of hot water is also productive of favourable results in some forms of disease, characterised by a morbidly diminished state of the secretion of the skin and mucous membranes.

The importance of the hot-air, or Turkish, bath, as an auxiliary to other methods of treatment, is not sufficiently

recognised by the profession. Dr. Marsh gives some interesting information on this subject. The moderate use of the hot-air bath has been proved to possess curative properties in rheumatism, gout, ague, dropsy, and diabetes; and it is very probable that a more extensive range of utility will be ascertained when additional trials of this form of bath have been made by medical men.

The subject of inhalation occupies only a small proportion of the book, and most of the author's observations in this chapter are respecting the value of fresh air for the proper performance of the respiratory function. He lays some stress upon the good results to be obtained from the inhalation of atmospheric air charged with different gases, such as oxygen, and the vapour of iodine; but he only gives three cases in support of his views, and we are not inclined to alter our opinion, that the chief kind of inhalation from which material benefit can be derived is that which, either by local or general means, tends to increase the capacity of the lungs for air, and thus facilitates the decarbonisation of the blood.

Advice to a Mother on the Management of her Offspring. By P. H. CHAVASSE, F.R.C.S. Seventh Edition, Fcap. 8vo., pp. 316. London: Churchill and Sons. 1864.

MR. CHAVASSE'S book has been so long before the profession and the public, that a lengthened notice of it is unnecessary. The circulation which it has gained is one of the best proofs of its usefulness, which, from careful additions and alterations in each edition, has become increased instead of diminished, by the lapse of a quarter of a century, since its first appearance in 1839. The present edition, which possesses the advantage over its predecessors of numerous notes and annotations by Sir Charles Locock, affords frequent proofs that Mr. Chavasse has ably striven to keep up with modern views.

This book is more especially intended for the guidance of mothers in the rearing of their children, but it includes useful information upon many points which are little, if at all, discussed in medical treatises, so that it is worthy of the perusal of practitioners, who are sometimes, in no small degree, puzzled to answer promptly the questions which are put to them by anxious mothers respecting the diet, clothing, ablution, and many other points concerned in the management of infants and children. It has further the recommendation of placing the medical profession in a proper light; for unlike the majority of the authors of popular medical works,

who seem chiefly bent on the praise of themselves, and the depreciation of others, Mr. Chavasse writes in an unassuming manner, and lays particular stress upon the fact that, in all cases of illness, unless of a very trifling and temporary nature, a medical practitioner should be consulted, and that close attention should be paid to his directions.

The book is divided into three parts: Part 1 is devoted to the management of infancy; Part 2 treats of childhood; and Part 3 gives a description of the points of chief importance in connection with boyhood and girlhood. In each division, diet, clothing, bathing, exercise, amusements, the plan of action to be adopted in medical and surgical cases until proper professional advice can be obtained, and many other subjects of special interest at certain periods of life, are all ably and fully discussed.

Mr. Chavasse offers some excellent advice to parents on domestic medicine, and his remarks on this point cannot fail to be of great benefit. The indiscriminate administration of calomel, grey powder, opiates, and other powerful drugs is always reprehensible; and the author furnishes statistics and facts which afford striking proof of the injury and risk to life which result from their use by ignorant or unthinking persons.

Before concluding our notice of this excellent work, we must refer to one point upon which we think that Mr. Chavasse is in error. He very rightly speaks of fresh air as being of primary importance in the treatment of scarlet fever, to which disease he has evidently paid much attention; but we must question the complete accuracy of his views, when he states that aperient medicines are "highly improper and dangerous both before and during the period of eruption." All authorities on this subject are agreed upon the advisability of the administration of laxatives in order to relieve the bowels. Too free purgation is certainly wrong; but the removal of indigestible and irritating matter from the intestinal canal by means of some mild aperient, such as castor-oil, given in an early stage of scarlet fever is perfectly safe, and generally productive of benefit.

Cre-Fydd's Family Fare, or Young Housewife's Daily Assistant, with a Dietary for Invalids, &c. Post 8vo., pp. 500. Second Edition, Revised. London: Simpkin, Marshall and Co. 1864.

FEW matters are of more social and sanitary importance than the preparation of our food, and such a book as the one

before us is consequently of inestimable value in setting us right upon the many points connected with this subject. Unlike the majority of cookery books, it is clearly and sensibly written, and is thoroughly practical. There is no attempt at mystification and fine writing by the introduction of unintelligible French phrases, but everything is stated in plain language, and the exact quantity or weight of every ingredient used in making the numerous dishes is specified, so that the inevitable mistakes into which the uninitiated must fall in trying to follow out the receipts given in other works are avoided.

The contents of Cre-Fydd's book are almost as diversified as the dishes which the authoress instructs us how to make, at a small cost and with true economy of materials. First, comes a series of bills of fare for every meal for every day in the year, a feature which of itself is both novel and useful. Next, are given bills of fare for dinner and evening parties for eight, ten, or more persons, showing at a glance the average cost of each entertainment. The receipts amount to nearly a thousand in number, and include directions for preparing every dish which can possibly be wanted at the table, whether of a man of moderate means, or of a prince with large income and unbounded palate.

We especially commend to the notice of our readers the items for invalids, amongst which will be found many little delicacies for the sick chamber which, being alike nutritious and easily digested, will furnish no small aid to the physician in promoting the speedy recovery of his patient, after medicine has done its work in subduing the active symptoms of disease.

Other chapters, such as those headed "a few things worth knowing," "hints to mistresses," and "hints to servants," are well-written, and treat of matters of vital importance, as regards the comfort of every household.

We have very great pleasure in endorsing all that has been said in the numerous favourable notices of this book which have appeared in different professional and other journals, and we trust that the demand for the work will be such as will fully repay the authoress for the trouble and care which she has bestowed upon its compilation.

NOTES ON THE BRITISH PHARMACOPŒIA.

Showing the Nature and Extent of the Changes which have been Made,
and the Properties and Doses of the New Remedies and Preparations.

[Continued from page 187.]

No. II.

Calcis Carbonas Præcipitata. Calcis Phosphas Præcipitata.—These two salts have been introduced into the Pharmacopœia in consequence of their being employed in making two preparations, the *Mistura Cretæ* and the *Pulvis Antimonialis*. The precipitated carbonate of lime is used in making the former preparation, and the precipitated phosphate of lime enters into the composition of the latter.

Cannabis Indica, or Indian Hemp, is a valuable remedy, possessing marked anti-spasmodic and anodyne properties; and may be advantageously substituted for opium in many cases where a sedative action is indicated, as it has not the same tendency as the latter drug to the production of constipation or headache. The parts of the plant which have been made officinal are the flowering tops of the female variety, in which are contained the resinous exudation to which its medicinal properties are due. The Pharmacopœial preparations are the *extract*, given in doses of a quarter of a grain to one grain, or even more; and the *tincture*, of which the dose is from five to thirty minims. When mixed with water, the resin becomes precipitated, and it is therefore advisable to add a little alkali, such as a small quantity of spirits of ammonia, by which it is held in solution.

Chirata.—This remedy has only had a place hitherto in the Edinburgh and Dublin Pharmacopœias, although it has for a long time been in use, especially in hospital and dispensary practice. Like other plants belonging to the natural order *Gentianaceæ*, *Chirata*, or *Chiretta*, is a powerful bitter, and possesses tonic properties, on which account it is used in the treatment of some forms of dyspepsia. This plant, every part of which is directed to be used in making the Pharmacopœial preparations, grows in large quantities in Northern India. Preparations: the *Infusion*, given in doses of one to two ounces; the *Tincture*, in doses of one drachm, or more.

Cocculus Indicus.—This is the dried fruit of a plant called the *Anamirta Cocculus*, which is a native of the Malabar coast and of the Eastern Archipelago. Its introduction into the Pharmacopœia is a subject of regret, as it has no important remedial property, while it is a very powerful narcotic poison, as has been recently shown upon a large scale, by the total destruction of the fish throughout the extent of many miles in certain rivers into which this poison had been introduced. At one time it was supposed to be used in brewing, for the purpose of imparting bitter and intoxicating properties to beer, and legislative measures were accordingly framed, imposing heavy penalties upon brewers for having *Cocculus Indicus* in their possession, and upon chemists for selling it to them. There is reason to fear that this disreputable practice, although of course the idea of it would be scouted amongst respectable brewers, prevails to a considerable extent amongst dishonest publicans in those parts of large towns which are inhabited by the lower classes; and it is to be hoped that *Cocculus Indicus* will be expunged from the next edition of the Pharmacopœia, so that no colourable excuse for its sale may be afforded by its appearance in the list of *Materia Medica*. Only one preparation is made from it, viz., *Unguentum Cocculi*, which is sometimes used as an external application for the purpose of destroying vermin on the surface of the body. If the skin be abraded, the danger arising from the use of this ointment is extreme, and cases have

been recorded in which death was produced by the absorption of the poison.

Collodium.—The value of this substance as a local application in the treatment of wounds, burns, &c., when it is desirable to prevent the contact of the air with the injured part, is well known. It is made by dissolving Pyroxylin, or Gun Cotton, in ether and rectified spirit. Directions for making Pyroxylin are given in one of the Appendices to the Pharmacopœia, but, as has been pointed out by Professor Redwood, the gun cotton which would be obtained by accurately following these directions would be insoluble, and not soluble, as would be requisite in order to procure a perfect specimen of collodion. A great objection which has been made to collodion, especially when the common varieties are used, is, that it has a tendency, after drying, to crack, and thus cause painful dragging of the tissues to which it is applied. This drawback may be obviated by the addition of two or three parts of pure glycerine to one hundred parts of collodion; the addition of this small proportion of glycerine is sufficient to give considerable suppleness and flexibility to the collodion.

Conii Fructus.—In the London Pharmacopœia only the leaves of the *Conium maculatum* were directed to be used, but the fruit has been introduced into the present work. It is unnecessary to dwell upon the medicinal properties of hemlock, which is frequently used on account of its sedative action upon the nervous system. The *tinctura conii* is now directed to be made from the fruit of the hemlock, and it should be borne in mind that its strength is about double that of the old Pharmacopœia, so that the dose is from twenty minims upwards.

Cusso or *Kousso*.—The dried flowers of the Kousso, or *Brayera anthelmintica*, an Abyssinian plant, have long been reputed as efficacious in the treatment of tape-worm and of the bothriocephalus. The powdered Kousso is given in doses of a quarter to half an ounce; in larger doses, and sometimes even in the quantity mentioned, it produces sickness and abdominal cramps, while it frequently fails to bring away the head of the worm. The officinal preparation is the infusion, a fluid ounce of which contains a quarter of an ounce of Kousso. When this remedy is used, whether in the form of powder or of the infusion, it is best to give a full dose of castor-oil about two hours after the Kousso has been taken, as this drug possesses scarcely any cathartic property. The worm usually begins to come away at the third or fourth evacuation following the administration of the medicine.

Digitalinum.—Digitalin is an uncrystallisable substance, obtained from Digitalis, of which it is considered to be the active principle; it is said to be one hundred times stronger than the dried leaf of the plant. The dose in which it is usually given by the few practitioners who prefer it to the other preparations of Digitalis, is one fiftieth of a grain.

Fel Bovinum.—Purified Ox Bile is now made officinal, and the method in which it is directed to be made is preferable to that commonly employed. Its value as a remedy is doubtful, although like another animal substance which is given in dyspepsia, Pepsine, it has been warmly praised by its partisans. The cases of dyspepsia in which ox bile is given are those in which there is a deficiency of the biliary secretion. The dose is three grains or more, and it is advisable to administer it enclosed in capsules, so that the bile may not come in contact with the stomach.

Ferri Arsenias.—This preparation has been administered internally in the treatment of cancerous affections and of skin diseases, and has also been employed externally in the form of ointment in the same classes of cases, but very little can as yet be said in its favour. The dose of the arseniate of iron should begin at one-twentieth of a grain.

Ferri et Quinice Citras.—This is a new double salt, of which the composition is sufficiently expressed in its name. It is a valuable preparation,

and may be, when the salts of iron are indicated, given in three to six-grain doses.

Ferri Oxidum Magneticum.—This is not the common magnetic oxide of iron, formed in scales, but is obtained by precipitation. It is composed of three equivalents of iron and four of oxygen, and may be considered as a mixed oxide or salt, in which the protoxide of iron serves as a base, and the sesquioxide plays the part of an acid. The dose in which it may be administered is from three to five grains. It should be taken with the food.

Ferri Perchloridi Liquor.—This solution is of about the same strength as the *Tinctura Ferri Sesquichloridi* of the London Pharmacopœia, and may be given in the same dose. It is much superior to the old preparation in uniformity of strength, and is freer from acidity.

Ferri Pernitratis Liquor.—This is an orange-brown liquid, made by the solution, in distilled water, of the pernitrates of iron, obtained by acting upon iron wire by means of nitric acid. It is rather acid and very astringent, and has been sometimes used, in consequence of the latter property.

Ferri Phosphas.—This preparation was more extensively used in medicine formerly than it is at present. It is useful as a tonic, especially in cases which are connected with the scrofulous diathesis. The late Dr. Prout thought highly of it in the treatment of diabetes, in which disease it is not unfrequently productive of good results. The syrup of the phosphate of iron, which is one of the new pharmacopœial preparations, contains one grain of the phosphate in each fluid drachm. Doses of phosphate of iron, 3 to 10 grains; of the syrup, 1 to 3 drachms.

Ferrum Redactum.—This is iron reduced to the metallic state from the oxide of the metal, by the agency of hydrogen gas. It is of a steel-grey colour; always contains a variable quantity of the magnetic oxide of iron; and becomes oxidised upon exposure to the atmosphere. A similar preparation, *Fer réduit* exists in the French Codex; and *Ferrum redactum* will also be found amongst the numerous medicinal agents introduced into the new American Pharmacopœia, of which an account is given in a former number of the "Medical Mirror" (*Vide p. 49 et seq.*). Dr. Garrod, who has had considerable experience in the use of this remedy, says that it is easily dissolved in the stomach, and absorbed, and that it produces scarcely any local effect, especially when it is taken with the patient's food; and he further states that he has come to the conclusion that it is a very powerful remedy, and comparatively most useful in all purely anœmic conditions. One grain, which is the dose in which the reduced metallic iron should be given, is equal to five grains of the citrate of iron and quinine. It is best given between two pieces of bread and butter, and in this manner it is scarcely perceptible by the patient.

Filix.—The rhizome of the *Nephrodium filix mas*, or male shield fern, is the part of the plant which has been made officinal. The only pharmaceutical preparation is the liquid extract, which consists of the oily substance extracted from the rhizome by the aid of ether. The dose in which the liquid extract should be given is from one to two drachms, and, as in the case of many of the anthelmintics, its administration should be followed by that of a purgative in the course of a few hours. It is very efficacious in the treatment of the *Bothriocephalus latus*, *Lumbrici*, and the *Tænia solium*: but its remedial value depends, in very great measure, upon the place and season of the year at which the rhizomes have been collected. According to Küchenmeister, the action of the extract is increased by sprinkling some of the powdered root over it before it is taken. The infusion and decoction, in doses of half an ounce to two ounces, are also sometimes used. The quantity of the powder which should be administered is from sixty grains to half an ounce.

Glycerinum.—Glycerine, which is now extensively employed externally,

and as a vehicle for more active remedies internally, is one of the most useful of the new *Materia Medica* in the British Pharmacopœia; unfortunately, large quantities of impure and almost worthless glycerine are prepared for sale, or the value of this substance would be more fully recognised. The best and, in fact, the only pure glycerine, is that which is obtained from palm-oil by the agency of steam, in the process known as Wilson's, or Price's, and followed at the manufactories of the company which bears the latter name; glycerine which is made in other ways always contains oxide of lead, chlorides, or other impurities. Pure glycerine "is a colourless and inodorous liquid, even after it has been rubbed between the hands (which will bring out the unpleasant, mouse-like smell of the volatile fatty acids, usually present in glycerine of inferior quality), of the consistence of a thick syrup, and of a fresh, sweet taste. It is soluble, in all proportions, in water and in alcohol, but is not dissolved by ether. Its sp. gr. is 1.240 to 1.260." ("On Glycerine, and its Uses in Medicine, Surgery, and Pharmacy," by W. Abbotts Smith, M.D., p. 15). The chief impurities, which more or less impair the remedial value of glycerine, are the volatile fatty acids, lime, oxide of lead, and other metallic bases, sulphuric acid, and chlorine. The fatty acids may be detected upon rubbing some of the glycerine between the hands; lime will be thrown down, when present, on the addition of oxalate of ammonia; sulphuric acid and the sulphates cause a white precipitate of the sulphate of baryta, insoluble in nitric acid, on the addition of a solution of the nitrate of baryta, or of the chloride of barium, to the adulterated glycerine; chlorine and the chlorides produce a precipitate with a solution of nitrate of silver. Externally, glycerine may be advantageously employed, either alone or in combination, in the treatment of wounds, burns, scalds, many forms of skin disease, deafness from deficiency or abnormal hardness of the ceruminous secretion of the ear, affections of the eye connected with a diminution of the secretion of the Meibomian glands, &c. The bland, unirritating nature of glycerine renders it worthy of fair trial internally in the treatment of inflammatory diseases of the mucous, lining membrane of the intestines; but no complete evidence has yet been given of its value, as supposed by some, as a substitute for cod-liver oil, internally. In pharmacy, glycerine plays an important part, as it readily dissolves many remedial agents, and is consequently a good vehicle in the preparation of ointments, lotions, liniments, injections, collyria, gargles, &c.

Hemidesmus.—The formula for the preparation of a syrup from the root of the *Hemidesmus Indicus*, or Indian sarsaparilla, is given in the present Pharmacopœia. The action of this drug is supposed by some to be analogous to that of sarsaparilla, and it has, therefore, been occasionally employed as an antisyphilitic. Its curative power is very doubtful, and, as Dr. Garrod has remarked in his lectures, it might have been omitted from the British Pharmacopœia, as its fragrant odour is the only characteristic which it has to recommend it.

Kamela.—This is the powder obtained from the capsules of the fruit of the *Rottlera tinctoria*, a plant which grows in India, China, and some other parts of Asia. Attention was first directed to it a few years since by Dr. Mackinnon and some other practitioners who had lived in India, and it has been highly spoken of by several writers since its introduction into this country. It may be given, in cases of *tænia* or of *lumbrici*, in doses of one drachm, or the tincture (not made officinal in the British Pharmacopœia), may be administered in two-drachm doses; four or six successive doses should be given at intervals of four or five hours. It is desirable to combine a little hyoscyamas with this remedy, or to administer some carminative, in order to prevent the griping pains which accompany its action. Unlike most other anthelmintics, kamela does not require to be followed up by any purgative, as its action upon the bowels is usually

well marked. The tincture, when it is freshly prepared, is superior to the powder, as its effects are more certain, and it seldom gives rise to severe nausea or colic.

Laurocerasus.—The leaves of the cherry-laurel have been made officinal, and are used in making Aqua laurocerasi, which derives whatever remedial value it may possess from the circumstance of its containing prussic acid. The dose of cherry-laurel water is from half a drachm to a drachm, but as it varies considerably in strength, it is not likely to be brought into much use.

Lithiæ Carbonas. Lithiæ Citras.—These two salts of the oxide of lithium have been only recently employed in medicine. Dr. Garrod, who has experimented largely with them, says that lithia is easily absorbed by the stomach and eliminated by the kidneys. In this process the carbonate remains unchanged; while the citrate is converted into a carbonate. In combination with vegetable acids, and well diluted with water, lithia acts as a powerful diuretic; and it renders the urine neutral or alkaline more readily than potash and soda do. These salts are productive of benefit, if administered in cases where there is a tendency to the deposition of urate of soda, as lithia forms with uric acid a salt which is much more soluble than those constituted by the other bases, so that it more readily holds the uric acid in solution, and hinders its deposition. The dose of the citrate of lithia is from three to six grains; that of the carbonate from four to ten grains.

Matico.—The dried leaves of a plant, called the *Artanthe elongata*, in which a considerable quantity of astringent matter is contained. The powder of the leaves, applied to the bleeding surface, has long been in vogue for external use as a styptic in cases of hæmorrhage. Directions are given in the Pharmacopœia for making an infusion of matico, which from a few observations which have been made, appears to have some remedial property in the treatment of internal hæmorrhages, and of inflammation of the mucous membrane of the bladder.

Nectandra.—The *Nectandra Rodiæi* is the tree, from the bark of which beberine is obtained. This alkaloid is sometimes used in the form of the sulphate, which has been already described at page 182 of the "Medical Mirror."

Podophylli Resina.—This is a resinous substance, which is obtained from the root of the *Podophyllum peltatum* by means of rectified spirit. It is commonly called podophylline, but as this name, owing to the termination "ine," conveys the erroneous impression that it is an alkaloid, the compilers of the Pharmacopœia have very properly changed the designation of this substance. It has a powerful action upon the liver, producing a copious flow of bile, and is a very efficient purge, so that it may very advantageously be substituted for mercury as a cholagogue. Its effects in the diminution of dropsical effusions is strongly marked. Given by itself it causes much griping pain in the bowels, and it should therefore be combined with ginger, or with the extract of hyoscyamus, in order to prevent this unpleasant consequence of its administration. The dose is from one-sixth of a grain to one grain.

Potassæ Citras.—The neutral citrate of potash, composed of one equivalent of citric acid with three of potash, is a useful preparation where salines, and especially the salts of potash, are indicated. It has less tendency to produce purging than most of the other salts, and is agreeable to the taste. It has little action upon the stomach but affects chiefly the kidneys, increasing the secretion of urine. It may be given in doses of twenty to sixty grains, in cases of uric acid gravel, and it possesses decided antiscorbutic properties.

Potassæ Permanganas.—This is intended for external use. The pharmacopœial preparation is the solution (*Liquor Potassæ Permanganatis*),

which contains four grains in each fluid ounce. It is a powerful deodoriser and antiseptic, and may consequently be used with advantage in gargles and lotions, for the purpose of cleansing diseased surfaces and removing decomposing matter. The ordinary strength of a lotion of the permanganate of potash would be in the proportion of a fluid drachm of the pharmacopœial solution to from six to ten ounces of water.

Potassii Bromidum.—The bromide of potassium possesses a marked sedative action upon the nervous system, and has been tried with satisfactory results in the treatment of epilepsy, hysteria, and other affections attended by excessive sensibility of the nervous system. It also acts as a local anæsthetic upon the generative organs and the larynx, and has been found to be very valuable in whooping-cough. By some continental practitioners it has been administered internally in large doses, up to thirty or more grains, for the purpose of deadening the sensibility of the eyeball during operations upon that organ.

Sabadilla.—The dried fruit of this plant, brought from Mexico, is used in the preparation of Veratria, from which an ointment, Unguentum Veratriæ, is made. Sabadilla is not itself used medicinally.

Saccharum Lactis.—Sugar of milk is a crystallized form of sugar obtained from the whey of cow's milk by evaporation. An article of food rather than of medicine, and certainly unnecessarily introduced into the Pharmacopœia.

Santonica.—The unexpanded flower-heads of a species of *Artemisia*, from which the following preparation is made.

Santoninum.—Santonine is a crystalline neutral principle; it is scarcely soluble in cold water, sparingly in boiling water, but easily dissolved by chloroform and boiling rectified spirit, and by fatty oils. It is of a white colour, but becomes changed to a yellow tint when exposed to the sunlight. It has a slightly acid reaction, and a series of salts, santonates, of which the santonate of soda is the one most employed, are formed by its combination with certain bases. It is a good anthelmintic, and owing to the small quantity which is requisite for a dose, and to its tasteless character, it is well-adapted for administration to children. When given internally, it is most efficacious in the treatment of lumbrici, next in that of tape-worm, and least in that of the thread-worm. The best way of using santonine in the treatment of the last-named species of entozoon is to inject it in an enema. For children, the dose of santonine is from one to three grains, and for adults, two to five or more grains, given twice daily; the remedy may be repeated every third or fourth day for one or more successive weeks, if it be requisite. It should be given in castor-oil; or, if the oil be unsuitable, the powdered santonine may be given on some bread and butter, a purgative being administered about three hours afterwards. Santonine, when given in a full dose, sometimes causes a peculiar coloration of the vision, so that everything appears to the patient to be of a yellow or greenish hue. This phenomenon soon passes off, and is never productive of any serious results.

Sodæ Arsenias.—The arseniate of soda possesses similar properties to the arseniate of potash, and may be given in the same classes of skin diseases. Dissolved in water, it constitutes the Liquor Sodæ Arseniatis of the new Pharmacopœia. This solution can be administered in one to five minim doses three times a day.

Zinci Acetas.—This is sometimes employed externally, in the form of lotion, as an astringent instead of the sulphate. If used internally, the dose would be from one grain to five grains.

Zinci Carbonas.—The pure carbonate of zinc has been introduced in the place of the Calamine of the old Pharmacopœia, which was always in an impure state, and was either carbonate or oxide, according to the heat employed in its preparation.

Zinci Valerianas.—The valerianate of zinc possesses some value in the treatment of various affections of the nervous system, such as hysteria, epilepsy, chorea, and obstinate headache. Dose : from one grain to five grains.

In our next notice, we shall comment upon the leading points of practical interest connected with the new preparations introduced into the Pharmacopœia.

(To be continued.)

MONTHLY RETROSPECT OF BRITISH AND FOREIGN MEDICAL JOURNALS.

MEDICINE AND SURGERY.

The Treatment of Mania by Digitalis.—The last number of the “Journal of Mental Science” contains a paper by Dr. Robertson, Medical Superintendent of the Sussex Asylum, giving the results of his treatment of maniacal excitement, both recent and chronic, by the administration of digitalis. The action of the drug appears, in such cases, to be that of a narcotic to the cerebro-spinal system; it calms the excitement, and enables the patient to pass, without wear or irritation, through this stage of the malady. Dr. Robertson says, that it steadies the pulse, and allows of the brain being better supplied with blood, by which is obviated the tendency which exists to the effusion of serum, consequent on the inflammatory process which goes on in this stage, in the arachnoid and pia mater, according to recent observers. The dose in which Dr. Robertson gave the digitalis, of which the tincture was the preparation made use of, was in half-drachm doses, twice or thrice daily; in some cases, he gives drachm doses during the first few days of treatment, but as a rule he confines the remedy to half-drachm doses. It should also be mentioned that, in order to test the real value of digitalis, he ordered it to be taken simply in water, so as not to complicate his observations. The following combination, however, is one which he has found of value in many cases of chronic mania, with sleepless, noisy nights:—*R Tincturæ digitalis, tincturæ cannabis Indicæ, liquoris opii, etheris chlorici, singulorum unciam.* Dose: half a drachm to a drachm, repeated at intervals of three or four hours. Maniacal excitement is very troublesome and difficult to treat, and, as there is a reckless violence during its continuance, which leads patients to do injury, especially to others, it is very important to have a remedy upon which we can depend for controlling the excitement.

Case of Popliteal Aneurism Cured by Compression.—Henry P., a man of cachectic appearance, though tolerably muscular, aged 32, was admitted into the South Devon Hospital, at Plymouth, on the 13th of July, under the care of Mr. Whipple. Upon examination an aneurismal tumour, about the size of an orange, but rather ovoid in shape, was found to exist in Scarpa's triangle about four inches below Poupart's ligament, in the course of the femoral vessel. Pulsation and bruit very distinct. Neuralgia in the course of the anterior crural nerves, extending from the upper part of the thigh to the knee. The following is an abstract of the method of treatment which was adopted :—

July 15.—Mr. Whipple fixed a horse-shoe tourniquet over the femoral vessel, about two inches above the tumour, and a conical pad (composed of squares of adhesive plaster spread on thick leather) was adjusted to the seat of pressure. The instrument to be kept on for the space of one hour three times a-day, and as much pressure to be employed as the man can conveniently bear. To have the ordinary meat diet of the hospital, with one pint of beer. 16th.—The neuralgia of the limb has increased since the application of the tourniquet, so that the sleep at night is much impaired. Half a grain of morphia. 22nd.—The limb is much swollen from thigh to knee, tense, oedematous, and tender to manipulation. No redness. Ordered to discontinue application of tourniquet for a few days. To apply cold-water cloths, kept continually moist, to the limb, and to take an anodyne draught when necessary. During the application of the instrument, the pressure exerted has been sufficient to diminish the pulsation and bruit in the tumour, and now, when the instrument is off, both pulsation and bruit are notably less. 29th.—The swelling and pain in the limb nearly gone. To resume the application of tourniquet. August 1.—Since the 29th ult., the tourniquet has been applied seven or eight times a-day, for an hour at a time; and, for the last two days, no pulsation has been perceptible while the instrument was on the limb, but it has returned on withdrawing the pressure. A bladder of ice ordered to be applied to the tumour, and the pressure to be continued. 2nd.—After the instrument was taken off last night, no pulsation or bruit was detected in the tumour, though a slight pulsation returned a few hours afterwards. There is no beat to be felt to-day, though the instrument has been off for some hours. 3rd.—No pulsation or bruit. Tumour getting more solid, but still rather soft and elastic. To leave off the pressure and continue the ice. The latter is applied for about eight hours a-day. 6th.—No pulsation; more solidity. Continues the ice. 12th.—Tumour becomes

gradually more solid; neuralgia and oedema of limb quite gone. To discontinue the ice. 31st.—General health much improved; has gained flesh since admission; sits up in the afternoon. Tumour diminishing in size; feels harder, and its oval form less definable. Limb of same appearance as opposite one. Posterior and anterior tibials of aneurismal limb can just be felt beating; those of sound limb beat rather feebly. The temperature of each limb is the same. September 2.—Feels quite well, and has left the hospital to-day cured.—*Medical Times*.

Trephining the Mastoid Process.—This operation has been performed with successful results by M. Follin in several cases of abscess of the mastoid cells, dependent upon inflammation of the middle ear. In one of these, the patient, aged 44, had usually enjoyed good health, with the exception of frequent attacks of throat-affections, generally terminating in abscess. After one of these attacks, occurring in March, 1863, he was suddenly seized, early in the following month, with severe pain in the right ear. Three days afterwards, a copious purulent discharge occurred from the ear, and the patient became deaf. For a period of six weeks the pain continued to be very severe, and it extended to the whole of the right side of the head, and was accompanied by feverishness and delirium, particularly at night. The discharge and deafness remained unchanged for the next six months, but the pain was slightly diminished, although occasional exacerbations of the suffering were present. At the end of the first month of the disorder, a slight swelling was perceptible in the right mastoid region, and pain was produced by pressure on this part. At a later period the skin in this situation had assumed an erysipelatous redness, and the pain had greatly increased; the application of a seton temporarily relieved the pain, but no other effects were obtained. The patient then went to Paris to consult M. Follin. When he was first seen by that surgeon, the mastoid region was swollen, red, and tender to the touch; pus was discharged abundantly from the ear; and the patient, owing to the incessant pain in the right side of the head, was further prostrated by sleepless nights. M. Follin arrived at the conclusion that there was pus in the mastoid cells, and advised the use of the trephine. Consequently, on November 18th, a crucial incision was made over the mastoid process; and the four flaps were carefully dissected back, so as to lay bare the bone. The periosteum was next divided and raised, a small trephine was applied, and the bone was removed for rather more than a quarter of an inch in extent. The mastoid cells could then be seen, filled with a large quantity of pus.

The edges of the opening in the bone were then enlarged so as to give it a conical form, and some lint was introduced; the edges of the incision were kept apart, to prevent too rapid cicatrisation; and simple dressing was applied. On the next day both the discharge of pus and the pain in the head had ceased. The wound gradually suppurated, and granulation soon appeared. The patient progressed gradually towards recovery, the only complication which occurred being slight inflammation of the cervical glands; and within a month after the operation, the opening was completely cicatrised, and the patient relieved of all the symptoms, with the exception of the deafness, which was not remediable, owing to the extent of the disease prior to the operation. In two similar cases, which had previously been communicated to the Surgical Society of Paris by M. Follin, the operation of trephining the mastoid process was successfully performed; but in these there were also fistulous openings in the mastoid region.—*Gazette des Hopitaux*.

Treatment of Herpes Circinnatus by Tar.—M. Bouchut, Physician to the Children's Hospital at Paris, has lately employed tar, both in the vegetable and mineral forms, with advantage in the treatment of this affection. One of his formulæ is:—Starch, 1 part; glycerine, 15 parts; mix, and add 16 parts of tar. The patches to be painted over with this, night and morning. When coal-tar is used, M. Bouchut prescribes it with glycerine in equal parts; to be applied to the diseased patches every night and morning. The extension of the disease is immediately arrested, and the herpetic patches generally undergo change by the tenth or fifteenth day, the skin not resuming its normal appearance until the twenty-fifth or thirtieth day.—*Bulletin de Thérapeutique*.

Employment of Veratrum Viride in Diagnosis.—Dr. Percy, in a recent lecture, detailed the great advantage he had derived for some years from the employment of the Veratrum Viride in aid of the diagnosis of diseases of the heart and chest. By preparing patients by means of small doses of this substance, functional disturbances which mask and render obscure the suspected disease are removed or suspended, so as to allow of the characteristic signs becoming discoverable. In this way he has been enabled readily to diagnose cases of incipient phthisis, pleurisy, pneumonia, diseases of the heart, &c., which he never could have had any certainty respecting, without this preliminary step. The veratrum quiets the functional disturbances, lessens the rapidity of the circulation, tranquillises the respiration, and so moderates the activity of these functions that the physician can readily define and arrange

the sounds that are communicated to the ear.—*American Medical Times.*

PATHOLOGY.

Ossification of the Nerve-Cells in the Brain of a Lunatic.—It is not an uncommon occurrence to find within the brain ossification of the sheaths of the vessels, or of the connective tissue of the cerebral substance; but the ossification of the nerve-cells themselves is a rare and curious fact. This morbid condition has been recently observed by Professor Heschl, in the brain of a young man, twenty-six years of age, who had been affected for some time with deep melancholia, for which he was under treatment at the Lunatic Hospital of Vienna, where he died. Upon making a post-mortem examination, it was ascertained that upon the arachnoid membrane on the convex surface of the left anterior lobe there was situated a white bony lamella of the size of a lentil; a portion of the grey matter was converted into a filamentous mass, as large as a bean, infiltrated with a reddish-coloured serous fluid; the brain was much congested with blood, especially in the left hemisphere, and the membranes were adherent by means of little whitish depositions at several portions of its surface. The small substance was carefully examined; it was found to be formed by blood-vessels, partly converted into fat, and by connective tissue loaded with colouring matter. Its walls were of a greyish colour, and of a firmer consistence than the rest of the cerebral matter. Several groups of nerve-cells, which entered into the formation of this indurated portion, were ascertained, some to be wholly, others only partially, ossified. Some were transparent, and contained round or oval nuclei, and others, which were quite opaque, were loaded with calcareous matter, which was immediately dissolved on the addition of hydrochloric acid. These groups of nerve-cells had several prolongations, which connected them together, and earthy matter was even found in these prolongations.—*Österreichische Zeitschrift für Praktische Heilkunde.*

THE MONTH.

POOR-LAW MEDICAL REFORM.

MOST of our readers are familiar with the old fable of the father who, having called together his sons, placed before them a bundle of sticks and desired them to break it; their strength having proved inadequate to the task, he next

demonstrated the facility with which each of the sticks comprising the faggot could be broken, after the bands which held them fast together had been cut. The moral to be derived from this was, we need scarcely observe, that union is strength. This valuable lesson ought to be laid deeply to heart by a very numerous, useful, and intelligent section of the medical profession—the Poor-Law Medical Officers—who cannot fail ultimately to obtain the redress for which they seek, if they only, in a united manner, urge their claims for justice. We have been induced to make these remarks in consequence of a perusal of Mr. Griffin's recent and earnest appeal to his fellow Poor-Law medical officers. It is too evident, from a glance at Mr. Griffin's figures, that he has been, by many, insufficiently supported in his long and often disheartening struggle for an improvement in the status and remuneration of those who confer great benefit upon the State, in the same branch of the public service as himself. This is a condition of things which ought not to be; the cause in which Mr. Griffin has so zealously and ably striven is equally that of every gentleman who holds a Poor-Law medical appointment throughout the kingdom; and when we consider the number of these—over 3,000—one conclusion only can be arrived at, viz., that if the Poor-Law medical officers would adopt a proper system of co-operation, and support Mr. Griffin more actively than they have lately done, they would soon break down the already wavering obstacles to their obtaining justice.

MEDICO-ETHICAL ASSOCIATIONS.

One of the most notable circumstances during the past few months has been the formation of Medico-Ethical Societies, in various districts. We know of no means by which so much benefit can be derived by the profession, especially at so small a working cost, as the establishment of these associations. The tone of feeling amongst neighbouring practitioners is elevated by them; an increased degree of good-fellowship results, owing to the opportunities which the occasional meetings afford for the ready explanation of the little points of difference which must sometimes spring up through mutual misunderstanding, and which, though beginning from trifling origins, too frequently become widened into open breaches of friendship, causing many long years of jealousy, ill-feeling, and discomfort; irregular practice is discouraged and gradually rooted out, when opposed by a band of earnest, honest men; and the profession itself

grows, imperceptibly it may be, but surely, in public estimation. These are a few only of the advantages which may be derived from the formation of Medico-Ethical Associations. In the metropolis, and in some of our largest provincial towns, we have class societies, which serve the useful purpose of bringing men more into the bonds of social intercourse, but in the country districts the case is often different. The isolation of medical practitioners from each other by distance prevents the formation of large societies, but no objection can be urged against the union of a dozen, twenty, or more medical men for the purpose of promoting professional and social advancement. One of the most recently formed societies of this kind is that which has been established during the present year in the district of North Lonsdale, in Yorkshire, and which has already been productive of good results. What can be done in one county of England can be done in another; and we hope before long to see these societies thickly spread throughout the country. That such is likely to be the case is very probable from the rapidly increasing interest in this subject, upon which we have received several communications from correspondents residing in the provinces, and to which we shall again refer in a future number.

ACCIDENTAL POISONING FROM INSUFFICIENT LABELLING.

The numerous cases of accidental loss of life, arising through carelessness in dispensing, or insufficient labelling, show that proper measures for the prevention of such sad calamities have still to be adopted, notwithstanding the repeated warnings and suggestions which have issued from the press. Most of the inventions which have from time to time been submitted for trial have been found to be practically useless, on account either of their cost or of the cumbrous nature of the appliances devised. An ingenious label (Thonger's Patent) was exhibited at a recent meeting of the Pharmaceutical Society, where it gained the approbation of all the members present. It has since been approved of by Dr. Lankester and others. It is the ordinary dispensing label, with a broad border of sand-paper, which being of course, felt by the dispenser or patient in handling the bottle, at once shows that the bottle contains some dangerous preparation. We have examined some specimens of these patent labels, and consider that they are worthy of general adoption, on the grounds both of utility and economy.

MEDICAL INTELLIGENCE.

THE CASE OF ALLEGED POISONING BY A SURGEON IN CORNWALL.—In our last number we referred to this case, in which a medical practitioner was charged before the magistrates by his brother-in-law with having poisoned his brother. The case was dismissed by the magistrates, and Mr. Millett, the accused person, has since brought an action for libel, which has been tried at the Cornwall Assizes, and terminated in a verdict in Mr. Millett's favour, with damages against his brother-in-law to the extent of 400*l*.

THE PROPOSED LEGISLATION FOR CHEMISTS AND DRUGGISTS.—It is currently reported that the Branch Medical Council for England, after deliberation upon the proposed Amended Medical Act, have come to the conclusion "that it is not expedient at the present time to engage in fresh legislation." This resolution must, if persevered in, add another to the many charges of apathy which have been brought against the Medical Council.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—At the annual meeting on March 1, the following office-bearers were elected for 1864-65. President: Mr. Partridge; Vice-Presidents: Dr. A. Farre, Dr. Basham, Mr. Hilton, and Mr. Ferguson; Treasurers: Dr. Pitman and Mr. J. Dixon; Secretaries: Dr. H. W. Fuller and Mr. John Birkett; Librarians: Dr. A. P. Stewart and Mr. Henry Lee. Other Members of Council: Dr. Goodfellow, Dr. Gull, Dr. W. Jenner, Dr. Meryon, Dr. Sibson, Mr. Holmes Coote, Mr. G. V. Ellis, Mr. C. H. Moore, Mr. E. Newton, and Mr. Toynbee. The Annual Report showed that the society was in a very prosperous condition, although the aggregate number of Fellows is less than it has been in some previous years.

THE MEDICAL SOCIETY OF LONDON.—The ninety-first anniversary meeting of this society was held at Willis's Rooms, on March 8th; Mr. Edwin Canton, President, in the chair. The annual oration was delivered by Dr. Thudichum, and a large number of the Fellows subsequently dined together. The following gentlemen have been elected officers and members of Council for the ensuing year. President: Dr. Greenhalgh; Vice-Presidents: Dr. Davidson, Mr. Harding, Dr. Hare, and Mr. Lawson; Treasurer: Mr. G. H. Rogers Harrison; Secretaries in Ordinary: Dr. Gibb and Dr. E. S. Thompson; Secretary for Foreign Correspondence: Mr. De Méric. Other Members of Council: Dr. Althaus, Dr. Anstie, Mr. Barwell, Dr. J. Bird, Dr. J. H. Browne, Mr. T. Bryant, Dr. Camps, Mr. E. Canton, Dr. Cholmeley, Dr. A. Clarke, Mr. T. Weeden Cooke, Dr. J.

Jephson, Dr. Leared, Mr. Poland, Mr. H. P. Robarts, Dr. W. R. Rogers, Mr. Henry Smith, Dr. W. Abbotts Smith, Dr. Stocker, and Mr. Henry Thompson. Orator for 1865: Dr. Smiles.

SCHOLARSHIPS AT DOWNING COLLEGE, CAMBRIDGE.—There will be an examination, open to all students, whether members of the University or not, for four scholarships of the value of 40*l.* each per annum, at Downing College, on May 30th. The examinations will be principally in classics and elementary mathematics; but some weight will be attached to French and German, and especially to the elements of the natural sciences in connection with medicine.

DEATH OF PROFESSOR CASPER.—This eminent professor of forensic medicines, whose works are in course of publication by the New Sydenham Society, died recently at Berlin.

INSTITUTIONAL ITEMS.—A general meeting of the Governors of the North Staffordshire Infirmary has been called for April 14th, to consider a resolution passed at the last monthly meeting of the Committee, to the effect that “the present Infirmary is totally inadequate to the requirements of the important district of North Staffordshire.”—Mr. Samuel Howard, of Stanley, near Perth, has placed in the hands of trustees, for the use of the town of Burnley, sixteen acres of land, upon which to build an infirmary, to be named the “Howard Institution.” The land is worth 16,000*l.*, and the portion which is not required for the hospital is to be let for building sites, the proceeds of which are to go towards the endowment.—The Committee of Governors has decided upon the plans of the new hospital at Sherborne, to be called the Yeatman Hospital, and the rules of the Bridgewater Infirmary have been selected as those upon which the new institution shall be conducted.—A meeting has been held for the purpose of promoting the establishment of a hospital for the north-east of London. The gentlemen who are at the head of this movement seem to be singularly unmindful of the fact, that the already existing institutions in this district of London are not so fully supported as they deserve to be.—The Bishop of Ely, who died lately, has left the bulk of his property, nearly 40,000*l.*, to various charitable institutions, including the Westminster Hospital, King’s College Hospital, and the Westminster Dispensary, in London; and the Huntingdon County Hospital, the Suffolk General Hospital, and the Bradford Infirmary, in the provinces.—The late Mr. John Farnell, brewer, has left 1,000*l.* to each of the following institutions: The Hospital for Consumption at Brompton; the Royal Orthopædic Hospital; the Asylum for Idiots; and the Cancer Hospital.—The late Miss Gale, of Cadogan Place, has

bequeathed 1,000*l.* to the Middlesex Hospital, and 500*l.* each to the Winchester County Hospital and Royal Free Hospital.

EXTREME DISTRESS OF THE FAMILY OF A MEDICAL MAN.—An urgent appeal has been made, through the medium of the "Times," in behalf of the wife and four children of a medical man who has become suddenly and hopelessly insane. The case is one of a peculiarly distressing nature, and deserves the warmest sympathy of all, and especially of the members of the profession. The lady, who is herself in delicate health and an orphan, without private means, is now, with her four children, the youngest of whom is only a few months old, reduced from competence and happiness to poverty and misery, in consequence of the fearful calamity with which it has pleased Providence to visit her husband, who, previously to his sudden malady, occupied a good social position, and had won the respect of all by his untiring energy and his devotion to his profession. The case is recommended by several gentlemen, including Dr. Richard Quain, who will be happy to receive any pecuniary assistance for the family; and the Editor of "The Medical Mirror" will have great pleasure in receiving and forwarding any contributions (which would be acknowledged in the next number) sent to him at the Publisher's.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—The usual monthly meeting of this society was held on Monday, March 7th, at the Dental Hospital, Soho-square. The chair was taken by the President, Edward Saunders, Esq. Models of irregularities in the teeth and the plan of treatment adopted were exhibited and explained by Mr. Saunders, Mr. Harrison, and Mr. Parkes. A long and spirited discussion took place on Mr. Spence Bate's paper on the "Pathology of Dental Caries," read at previous meetings. Mr. Bate maintained that all enamel had a tendency to be less perfectly developed in its external surface; that in cases where there was a deterioration in the development of teeth, that external surface would be less perfectly developed than in other teeth; that it was common to find, in teeth predisposed to decay, that the external surface had a more than usually large amount of animal tissue existing in it. Passing to the dentine, he maintained that in every tooth where there was a predisposition to decay, certain marks called areolar spaces were found, and he came to the conclusion that those parts were of a less perfectly developed structure, containing a larger amount of animal tissue than the other parts. The green marks deposited on the teeth were nothing more than the decay of the external membrane, and the decay was really an absorption of oxygen by the animal matter in and about

the teeth, carbonic acid being formed, which decomposes the phosphate of lime, and left the animal constituents of the teeth exposed, so that a further quantity of carbonic acid was produced. A great many members took part in the discussion, and at the close a vote of thanks was accorded to Mr. Spence Bate.

MEDICAL REGISTER.—Of this yearly publication the Government takes 2,000 copies for the benefit of public functionaries, &c. The income of the Medical Council during the past year was 7,243*l.*, and the expenditure was 4,800*l.*, leaving a balance of 2,442*l.*

LONDON MORTALITY.—From a Parliamentary Return it appears that for all England and Wales the average annual mortality during the ten years, 1851—61, was 22·17 per 1,000. In the Farnborough district in the south, and in Bellingham and Rothbury in the north (Northumberland), the annual mortality averaged less than 15 in the 1,000.

SMALL-POX AT PORTSMOUTH.—The small-pox has made its appearance to a considerable extent amongst the soldiers and sailors at Portsmouth. There are many cases now in the hospital.

ROYAL COLLEGE OF SURGEONS.—Some years ago the Council of the above institution being desirous of diminishing the great amount of study required of candidates for the Fellowship of the College, passed the following resolution, much to the annoyance of some gentlemen who, at great expense of time and money, had undergone the full examination for that distinction, viz. : “Graduates in Medicine of any University in the United Kingdom are admitted to the Fellowship after having passed the professional examination in Surgery only, provided the educational and other requirements of such graduates by the University in question be deemed by the Council of this College equivalent to those imposed on the candidates for the Fellowship of this College.” This regulation is now rescinded, and henceforth candidates will have to undergo examinations in anatomy and physiology (with dissections in the case of junior candidates under twelve years’ standing), in addition to examinations in surgery and pathology (with operations on the dead body). The only relief afforded to the graduates in question will be exemption in the Arts’ examination.

TESTIMONIAL TO DR. LIVEING.—The students of Middlesex Hospital have presented their Demonstrator of Anatomy, Dr. Liveing, with a silver cup, as a token of their “appreciation of his uniform kindness and attention to them.”

PRESENTATION TO A MEDICAL GENTLEMAN.—Dr. Hawkins, of Hitchin, was, on the 27th ult., presented with a mag-

nificent silver salver and a thousand guineas. On settling at Hitchin, in 1820, Dr. Hawkins founded a dispensary, to which he attended single-handed for upwards of twenty years. Finding that the means at his disposal were wholly insufficient to supply the wants of the ever-increasing throng of patients attracted by his professional skill, and by that winning kindness which, perhaps, is the true secret of his extreme popularity, Dr. Hawkins directed all his efforts towards supplying them with more effectual means of relief. He made an appeal to the wealthy and benevolent inhabitants of the town, which was generously responded to, and the result was the erection, in 1842, of the present infirmary. Until October last, when he was suddenly struck with paralysis, from which he has not recovered, he unremittingly fulfilled the duties of surgeon to the institution; and it was to testify their gratitude for his lengthened services that the subscribers presented him with this splendid token of their regard.

THE ACTIVE PRINCIPLE OF THE CALABAR BEAN.—Two German chemists, Jobst and Hesse, of Stuttgart, have by their researches determined that this is exclusively contained in the cotyledons. They have obtained it by dissolving in ether the residue left by evaporation of an alcoholic solution. The ether solution, in its turn evaporated, leaves the active principle of the bean, which these chemists propose to call *physostygmine*, from the botanical name of the plant, *physostigma venenosa*. It has, however, been suggested that *calabarine* would be as appropriate, and a far more convenient name. Two drops of an aqueous solution of the alkaloid in ten minutes caused contraction of the pupil to about a twentieth of its diameter, it remaining in this state during an hour, and recovering its normal condition in from four to six hours. Taken internally, the *physostygmine* is as poisonous a substance as the most dangerous cyanides.

OXYGEN GAS.—At a recent meeting of the Academy of Sciences at Munich, Baron Liebig recounted various experiments which proved clearly that oxygen is not only evolved from the atmosphere by plants, but also in tolerably large quantities by decomposition of water in the bodies of flesh-eating animals. He thinks that a knowledge of this fact will throw quite a new light on the processes of nutrition and digestion.

DEATHS FROM THE INHALATION OF CARBONIC ACID GAS.—An inquest has lately been held at Bideford on the body of a young man who was found in the morning dead in his bedroom, where a coke fire had been burning all night. The room was entirely unventilated. A similar accident is re-

ported at Gloucester. Two old persons named Gough went to bed in a completely unventilated room, in which was placed a bucketful of glowing cinders just stirred from the grate. The next morning both were found in a state of insensibility, and one died on the same day.

FRENCH INQUIRY RESPECTING HOSPITALS.—M. Le Fort, so well known here in consequence of the favourable report he made concerning the English Hospitals, and which gave rise to a famous discussion at the Academy of Medicine, has just been despatched by M. Husson, Director of Public Assistance, to investigate the condition of the Hospitals in other parts of Europe, especially in Germany and Russia. Seeing that M. Le Fort's former report conveyed some imputations against French Hospital management, his present appointment is highly creditable to the authorities.

ANIMALCULÆ OF TYPHOID FEVER.—Professor Tigri, of Sienna, in Italy, has addressed a paper to the Academy of Sciences at Paris, wherein he declares that he has again found on the bodies of persons who had died of typhoid fever infusoria of the genus *Bacterium*.

UNIVERSITY COLLEGE.—The new members of Council are Henry William Busk, Esq., Edward Adams Leatham, Esq., M.P., and John Richard Quain, Esq. The new auditor is Augustus Prevost, Esq. Sir Francis Henry Goldsmid, Bart., has been re-elected President of the Senate, and has appointed Henry Crabbe Robinson, Esq., and Edward Armitty, Esq., Vice-Presidents.

SANITARY STATE OF IRELAND.—Dr. Mapother has lately sent a communication to the Statistical Society, in which he makes some frightful disclosures on the sanitary state of Ireland. In reference to Dublin, he recommends that the office of medical attendant upon the poor, registrar of deaths, and officer of health, be combined, so that the official would be enabled to direct his attention to any locality where disease, especially of a preventable nature, arose, or where deaths above the average occurred, and thus lead to a well-directed sanitary improvement.

THE ARMY MEDICAL SERVICE.—The return of the supplementary army estimates for 1863-4 has just been published. The estimated outlay of the medical establishment and supplies for the year is 15,900*l*.

A NEW THEORY OF MUSCULAR ACTION.—This is the title of a very able and ingenious thesis, read before the University of Dublin by the Rev. Dr. Haughton, of Trinity College. Dr. Wollaston, in 1809, drew attention to the "susurrus" of muscle in active contraction, and compared it to carriages at a distance passing rapidly over a pavement. He approxi-

mately estimated the frequency of the vibrations at about thirty-five or thirty-six in a second. Dr. Haughton confirms the observation by novel and more accurate experiments. These originated accidentally in an access of severe tinnitus aurium following fever, which prevented him sleeping at night. During restlessness from this cause, he amused himself by producing the susurrus in the masseter muscles, and observed that the tinnitus was in unison with the susurrus, but separated by several octaves. Ultimately, the musical note of the susurrus was fixed at what organ builders term C.C.C. in some persons, and D.D.D. in others, notes lying two octaves below bass C. and D. respectively, and to be found on pianos of recent construction only. The sound C. represented thirty-two and D. thirty-six vibrations in the second, while the tinnitus stood on high C., five octaves above. Dr. Haughton, struck, like Dr. Wollaston, with the resemblance of the sound to distant cabs, measured the intervals of the Guernsey granite pavement, and found them about four inches apart, thus giving three impulses in the foot. Supposing the cabs to drive at eight miles an hour, we have 35.2 impulses per second, coming marvellously near the original estimate of Dr. Wollaston. An organ-pipe, with a movable piston, was then made, enabling it to be tuned up and down in the neighbourhood of C.C.C. Dr. Stokes, who assisted in the experiments, tuned this to the susurrus as heard in the muscles of his own fore-arm, and found, by the method of "beats," that the vibrations were $35\frac{1}{3}$ per second, corresponding to a note rather flatter than D.D.D. natural. The author then proceeds to deduce from the rate of muscular contraction the "amount of work stored up in human muscles" by extending the arms horizontally, so that they are sustained entirely by the supra-spinatus and central portion of the deltoid. His own arms became tired in seven minutes, and those of other persons in periods varying from 6.5 to 10 minutes in males, from 10 to 15 minutes in adolescents, and from 7.5 to 12 minutes in females. From calculations based on the weight and leverage of the arm as a falling body, it is calculated that these muscles are capable of giving out work equal to raising 1083 lbs. through a foot, before they are exhausted. The muscles of the shoulder in a well developed male subject were dissected, and the supra spinatus, as well as the central portion of the deltoid, which was easily divisible into three obvious fasciculi, were weighed, amounting to $10\frac{1}{4}$ oz. Hence it follows that 1 lb. of such muscle is capable of lifting 1.56 ton through one foot. In the third part similar modes of investigation are applied to the heart, the daily work of which is shown to be 124.6 ft. tons;

more than one-third of the daily labouring force of the whole body. Lastly, this calculation is very ingeniously confirmed by a separate hydraulic process—namely, the distance to which jets of arterial blood were thrown on the floor of the operating theatre from an enlarged external epigastric artery, during the removal of a large fibro-cellular tumour by Mr. Colles, at the Meath Hospital. From this source is derived an estimate of 121·82 ft. tons, for the hydraulic work of the heart, which agrees very well with the muscular work as already given, slightly in excess of this figure.—*Med. Times.*

INTERNATIONAL REGISTRATION OF WEATHER AND DISEASE.—The Registrar-General has recently brought under the notice of the authorities of the great cities of Europe a plan for securing returns of diseases and of the weather simultaneous with those of London. Vienna, which is the seat of one of the greatest medical schools of Europe, has already responded to his application, and he expects to receive from that city a regular series of returns, which cannot fail to afford interesting comparisons with those of London. Vienna is about to adopt many of the sanitary improvements which have proved efficacious in England; and Dr. Glatter, a most zealous officer of the City Council, will be able to measure their effects on the reigning disease and the rate of mortality.

PREVENTING THE “TURNING” OF MILK.—A simple and effectual preventive of that disagreeable occurrence so frequent in summer, “turning” of milk, is found in the addition of one gramme (fifteen grains) of bicarbonate of soda to each litre (about a quart) of milk. This does not affect the taste of the milk, while it facilitates its digestion. It constitutes the only means of preserving the milk employed by one of the large Parisian milk establishments.

EPIDEMIOLOGICAL SOCIETY.—Dr. Babington has resigned the office of President of the Epidemiological Society; and Dr. Gavin Milroy has been nominated by the Council as his successor. The office is in future to be held for two years. Dr. Chowne and Dr. Murchison have been placed on the list of Vice-Presidents.

HEALTH OF SCOTLAND.—The Registrar-General's monthly report on the eight principal towns in Scotland, describes February as another month of heavy mortality, far above the average. Typhus fever carried off 206 persons, and in Perth was the cause of a fifth of the whole number of deaths, and of above a sixth in Aberdeen. The month was characterized by cold and wet in no ordinary degree. So also, the mean temperature of the month in the towns, averaging 33·8, was lower not only than in any February, but in any month of any year since registration was commenced, nine years ago.

PASS-LISTS.

ROYAL COLLEGE OF PHYSICIANS, LONDON.—At a general meeting of the Fellows held on the 21st of March, the following gentlemen were duly admitted members of the College:—Bagshawe, Frederick, M.B., 21, Connaught-square; Grant, James Alexander, M.D., Montreal, Canada; Witherby, William Henry, Coombe, Croydon.

UNIVERSITY OF LONDON.—At the first examination for the new degree of Master of Surgery, the following gentlemen passed:—Hewlett, Richard Whitfield, M.D., King's College; Rivington, Walter, M.B., London Hospital; Taafe, Rickard P. Burke, St. Bartholomew's Hospital.

ROYAL COLLEGE OF SURGEONS, LONDON.—THE FELLOWSHIP.—The following members, having been elected Fellows, were admitted to the Fellowship on the 11th of March:—Bell, William, Rochester; Tothill, Frederick Disting, Charles-street, S.W.; Smith, Charles Manners, H. M. Indian Army; Vines, Charles, Reading. LICENTIATES IN MIDWIFERY.—The following gentlemen, after due examination, were admitted Licentiates in Midwifery on the 16th of March:—Blanchet, Jean Baptiste, Quebec; Covey, Charles Edward, Basingstoke; Freeman, Richard Thomas, Hatcham; Harris, James Smith, St. John's-wood; Langhorn, Joseph, Savile-row; Monckton, Alfred, Brenchley, Kent; Thomas, George Frederick, Canterbury, New Zealand; Watermeyer, William Godfrey, Cape of Good Hope; Wilson, William Samuel, Bayswater.

APOTHECARIES' HALL, LONDON.—The following gentlemen were admitted to the Licentiatehip on the undermentioned dates:—March 3rd: Lloyd, Edward Sidney, Pill, near Bristol; Powdrell, John, Farndon, near Chester.—March 10th: Brotherton, William Henry, Bethnal-green-road; Grigg, William Chapman, Bristol; Harris, Walter, Waterford; Walker, George Charles, Bootle, Liverpool. On the same day, the following gentlemen passed their First Examination:—Brewster, Edward, Sheffield; Haxworth, Walter, Leeds.—March 17th: Colden, Edward, St. George's Hospital; Edwards, John Henry, Llangefni, Anglesea; Gandy, William, South-street, Park-lane; Garlick, William, Park-square, Leeds; Iles, Daniel, Fairford, Gloucestershire; Morris, Joseph, Studley, Warwickshire; Philpot, Harvey John, Wilton-terrace, Kensington; Price, Charles Richard, London Hospital; Shorland, Edward Peter, Westbury, Wilts; Watts, Algernon Newbegin, Westminster Hospital; Whitehead, Walter, Windermere; Wraith, John Hargreave, Over Darwen, Lancashire.—Passed the First Examination on the same day: Denton, Frederick George, Hornsea, Hull.

MEDICAL VACANCIES.

NOTTINGHAM GENERAL DISPENSARY.—For an Assistant-Surgeon. He will be required to visit patients, and to assist in the dispensing. Salary £100 per annum, with furnished apartments. Applications to be sent to the Secretary, on or before April 4th.

PARISH OF CLERKENWELL.—For a Medical Officer to the Northern District. Salary £50 per annum. Applications to be sent on or before the 5th of April under cover to the Clerk to the Guardians.

MIDDLESEX HOSPITAL.—For a Resident Clinical Assistant, on April 2nd. Particulars to be obtained of the Secretary to the Hospital.

GREAT NORTHERN HOSPITAL.—For a House-Surgeon. Applications to

be sent in on April 2nd to the Secretary, of whom further particulars can be obtained.

GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY, CARDIFF.—For a House-Surgeon. Salary £100 per annum, with furnished apartments, coals, gas, and attendance. Testimonials to be forwarded on or before April 5th.

QUEEN ADELAIDE'S DISPENSARY, BETHNAL GREEN.—For a House-Surgeon. Testimonials to be forwarded not later than April 9th. Election on April 12th. Salary £100 per annum, with furnished apartments, coals, and light.

T WER HAMLETS DISPENSARY, WELLCLOSE SQUARE, E.—For a Resident Medical Officer. Salary £100 per annum, with residence, coals, and lights. Candidates must attend personally, with testimonials, &c., on the 4th of April, at the Dispensary, at 7 p.m. In the event of a contest, the election is fixed for the 18th of April.

BRADFORD INFIRMARY.—For a House-Surgeon. Salary £120 per annum, with board and residence. Also for a Resident Medical Officer in the Dispensary department of the same institution. Salary £100 per annum, with board and residence. Applications to be sent, before April 16th, to Mr. Charles Woodcock, the Secretary, Sun-Bridge, Bradford.

ST. BARTHOLOMEW'S HOSPITAL, CHATHAM.—For a Dispenser, who must be qualified as an Apothecary. Salary £60 per annum, with board and residence. Election on April 14th. Further particulars to be obtained of Mr. Hayward, Solicitor, Rochester.

MEDICAL APPOINTMENTS.

ALLBUT, Thomas C., M.B.—Physician to the Leeds Dispensary.

ANDREW, J., M.D.—Assistant Physician to St. Bartholomew's Hospital.

BECKETT, A. R., Esq.—Resident Medical Officer to the Liverpool Workhouse and Fever Hospital.

BELLAMY, E., Esq.—Surgical Registrar to King's College Hospital.

BOYTON, J. E., Esq.—Medical Officer to the Aston-Rowant and Shirburn Districts of the Thame Union.

BRIGSTOCKE, H., Ext. L.R.C.P. Lond.—Physician to the South Staffordshire General Hospital.

BROWN, D. Dyce, M.D.—Resident Surgeon-Accoucheur to the Birmingham General Dispensary.

BUCKLE, F., M.D.—House-Surgeon to the West Norfolk and Lynn Hospital.

BULL, H. G., M.D.—Consulting Physician to the Hereford Dispensary.

COOPER, T. J., Esq.—Visiting Medical Officer to the Brighton and Hove Dispensary.

CRUCKNELL, H. H., M.B.—Physician to the Great Northern Hospital.

ELLIS, J., Esq.—Resident Medical Officer to St. Luke's Hospital for Lunatics.

FIDDES, David, M.D.—Physician to the Hospital for Incurables, Aberdeen.

FOSTER, M., M.D.—Medical Officer to the Godmanchester District of the Huntingdon Union.

FRASER, G. R., Esq.—Medical Officer to the No. 2 District of the Bellingham Union, Northumberland.

FRODSHAM, J. M., M.D.—Honorary Medical Officer to the Pimlico Dispensary.

GOLDING, James P., M.D.—Medical Officer to the City Dispensary, Cork.

HALL, C. S., Esq.—Medical Officer to the Workhouse and Union Hospital, Carlisle.

- HAMMOND, E. C., Esq., House-Surgeon to the York County Hospital.
- HARDESTY, J. J., Esq.—Medical Officer to the Parish of Garvad, Had-dingtonshire.
- HARGOOD, F. H., Esq.—Medical Superintendent to the Royal Lunatic Hospital, Liverpool.
- HEAD, E., M.B.—Physician to the Surrey Dispensary.
- HILLIER, T., M.D.—Physician to the Skin Department of University College Hospital.
- HOPWOOD, E., Esq.—Medical Officer to No. 5 District of the Ashton-under-Lyne Union.
- JACKSON, T. V., Esq.—Surgeon to the South Saffordshire General Hospital, Wolverhampton.
- KEAL, W., Esq.—Surgeon to the Rutland Dispensary, Oakham.
- KILGOUR, A., M.D.—Consulting Physician to the Aberdeen Royal Infirmary.
- KNILL, J., Esq.—Medical Officer to the Faringdon District of the Faringdon Union, Berkshire.
- MACINTOSH, A., M.D.—Medical Officer to the Kirton District of the Boston Union.
- M'NAIR, F., Esq.—House-Surgeon to the Surrey Dispensary.
- MENZIES, D., M.R.C.P.—Physician to the Western General Dispensary.
- MITCHELL, T. R., M.D.—Admiralty Surgeon at Swanage, Dorsetshire.
- MONCKTON, A., Esq.—Medical Officer to the Brenchley and Hormonden Districts of the Tonbridge Union, Kent.
- MORRIS, J. G., Esq.—Visiting-Surgeon to the Hereford Dispensary.
- NAYLER, G., Esq.—Assistant-Surgeon to the Orthopædic Hospital.
- PERRY, R., M.D.—Dispensary Physician to the Royal Infirmary, Glasgow.
- POPE, R. H., Esq.—Medical Officer to the Cloghan District of the Stranorlar Union, Co. Donegal.
- REDDROP, J. Esq.—Medical Officer to the Tiverton West District of the Tiverton Union.
- REITH, A., M.D.—Physician to the Aberdeen Royal Infirmary.
- RICHARDS, D., Esq.—Medical Officer to the Brighton Workhouse and Industrial Schools.
- ROBERTS, J., M.D., Surgeon to the General Hospital for Children, Manchester.
- SARVIS, T., M.D.—Medical Officer of Health for Bethnal Green.
- SCOTT, N. G., Esq.—Resident Medical Officer to the City of London Hospital for Diseases of the Chest.
- SEATON, D., Esq.—Surgeon to the Rutland Dispensary, Oakham.
- SHANLEY, L. P., Esq.—Medical Officer to the Brideswell District of the Athlone Union, Ireland.
- SMITH, T., Esq., Assistant-Surgeon to St. Bartholomew's Hospital.
- SMITH, J., Esq.—Resident Medical Officer to the Notting Hill Dispensary.
- SPANTON, W. D., Esq.—House-Surgeon to the North Staffordshire Infirmary.
- STONE, C. B., M.B.—Medical Officer to the Killyond District of the Parsonstown Union, Ireland.
- WALLACE, A., M.D.—Physician to the Essex and Colchester Hospital.
- WARRENER, R., Esq.—Medical Officer to the Northern District of the Godstone Union, Surrey.
- WEBB, T., Esq.—Medical Officer to the Barton-under-Needwood District of the Burton-on-Trent Union.
- WILLIAMS, A. W., M.D.—Physician-Accoucheur to the Western General Dispensary.
- WILLIAMS, W., Esq.—Medical Officer to the Festiniog District of the Festiniog Union, Merionethshire.

WOODMAN, R., Esq.—Medical Officer to the Workhouse of the Flegg Union, Norfolk.

WRIGHT, G., Esq.—Medical Officer to the West Leyburn District of the Leyburn Union, Yorkshire.

DEATHS.

BEVAN, T., Esq., Surgeon, of Newport, Pembrokeshire, on March 4th, aged 63.

BRADY, T., M.D., at Upper Temple-street, Dublin, on March 16th, aged 62. The deceased was Physician to the Cork-street Fever Hospital, and Professor of Medical Jurisprudence at the Dublin University.

BRISTOWE, JOHN SYER, Esq., M.R.C.S., on February 29, at Clarence-place, Camberwell, aged 71,

BURNAND, Charles, Esq., M.R.C.S., Assistant Resident Medical Officer, London Fever Hospital, on March 10, aged 21.

BUTLER, J., Esq., M.R.C.S., on February 28, at Rectory-place, Woolwich, aged 65.

CARLYON, C., M.D., on March 5, at Truro, Cornwall, aged 86. After graduating as M.A. and M.D. at Cambridge, where he for some years held a Fellowship at Pembroke Hall, Dr. Carlyon settled as a Physician at Truro, and soon acquired a leading professional position in the county of Cornwall. He acted for many years as Physician to the Cornwall Infirmary, in which, and the other local charities, he always took a lively interest. He took an active part in municipal matters, being chosen five times Mayor of Truro, and was also a Magistrate for both the town and county. His chief literary works are "Early Years and Late Reflections," in which he detailed his travels in Central Europe and Sweden, which countries he had visited when he held a travelling scholarship from Cambridge, in company with the late Dr. Parry of Bath; "Precepts of Health;" and a pamphlet on the "Endemic Typhus Fever of Cornwall."

FROGLEY, Ralph Allen, Esq., F.R.C.S., of Hounslow, at Brighton, on March 15, aged 70. He was a skilful operator, and one of his cases, amputation of the thigh close to the hip-joint, for enchondroma, in which the limb equalled in weight more than a third of that of the whole body, is recorded in the "Medico-Chirurgical Transactions." The operation was successful, and the patient is still living.

HAMILTON, J., Esq., L.R.C.S. Edin., of Dungannon, Co. Tyrone, Ireland, on March 10.

HEATHCOTE, R. H., Esq., M.R.C.S., at Chorlton-upon-Medlock, on March 2.

KING, Gilbert, M.D., Inspector-General of Hospitals and Fleets, R.N., at 38, Gibson-square, Islington, on March 18, aged 73.

MACKENSIE, T., C.B., late Inspector-General of Hospitals, Bombay, at Cheltenham, on March 17.

MACPHERSON, R., Esq., of Birmingham, at Southport, Lancashire, on February 26, aged 53.

MASON, G., Esq., M.R.C.S., at Broad-street, Deal, on March 2, aged 50.

MILLER, W., M.D., formerly of Demerara, at Pitt-street, Edinburgh, on March 1.

POWELL, Robert Hutchinson, M.D., at Abbey-square, Chester, on March 10, aged 46. The deceased was one of the Physicians to the Chester General Infirmary, and contributed numerous papers on professional subjects to the medical journals.

QUINTON, W., Esq., M.R.C.S., at Cannock, Staffordshire, on March, 14, aged 53.

RANKINE, J., M.D., late of Blackwood, South Australia, on March 15, at Beulah Lodge, Helensburgh, aged 61.
 SYKES, J., Esq., M.R.C.S., at Mile-end-road, on March 17, aged 42.

BOOKS, ETC., RECEIVED.

- "A System of Surgery." By James Miller, F.R.C.S.
 "The Modern Treatment of Syphilitic Diseases." Fourth Edition. By Langston Parker, F.R.C.S.
 "On Paralysis, Neuralgia, and other Affections of the Nervous System; and their Successful Treatment by Galvanisation and Faradisation." Third Edition. By Julius Althaus, M.D.
 "On the Treatment of Syphilis and other Diseases without Mercury." By Charles Drysdale, M.D.
 "Advice to a Mother on the Management of her Offspring." Seventh Edition. By P. H. Chavasse, F.R.C.S.
 "Cre-Fydd's Family Fare; or, Young Housewife's Daily Assistant." Second Edition, Revised.
 "Cases of Procidencia Uteri, and Perineal Lacerations after Labour, Cured by Autoplastic Operations." (Pamphlet.) By D. Lloyd Roberts, M.D.
 "Gazette Médicale de Paris." Nos. 1 to 12, for January, February, and March.
 "The Pharmaceutical Journal," for March.
 "The Social Science Review," for March.
 "The Prescriber's Companion," by A. Meadows, M.D.

TO CORRESPONDENTS.

A Country Surgeon.—We shall be happy to insert the communication, if the cases are abridged. We do not belong to the self-satisfied class of men who, in their eager desire for centralization, imagine that the talent, judgment, and success of provincial operators are, in any degree, inferior to the same qualities in their London brethren. *Dr. W.*—The appointment was not included in "The Medical Mirror" list, because *Dr. W.* was simply re-elected to the office in question. It is customary with many public bodies to go through the form of annually re-electing their office-bearers, and we should obviously occupy space unnecessarily in recording these re-appointments. We shall always have pleasure in noticing new appointments, whenever we are furnished with the particulars of them. *A Would-be F.R.C.S.*—It is now imperative that all candidates for the examination for the Fellowship of the London College of Surgeons shall have previously passed the Preliminary Examination in Classics, Mathematics, and French. The classical subjects for the present year are:—Herodotus, Book 3; Euripides, *Medea*, and *Alcestis*; Livy, Books 26 and 27; Horace, *Epistles*. Each candidate is required to pass an examination upon one of the Greek and one of the Latin authors. We should advise our correspondent, when he next visits town, to make personal inquiries at the College.

Other gentlemen who have addressed letters to us upon various subjects will receive private answers, unless they have already done so.

* * * The Reviews of works by *Dr. Fuller*, *Dr. Althaus*, and *Mr. Le Gros Clark* will appear, with other Bibliographical Notices, in our May number.

THE MEDICAL MIRROR.

MAY, 1864.

ORIGINAL COMMUNICATIONS.

On Change of Air in the Prevention and Cure of Pulmonary Phthisis. By JOHN C. THOROWGOOD, M.D., M.R.C.P., Lond., Assistant-Physician to the City of London Hospital for Diseases of the Chest, Victoria Park, late Physician to Royal General Dispensary.

(Concluded from page 206.)

PURSUING the consideration of climates known generally as mild and relaxing, with more or less humidity in the air, we may add a few more remarks on that part of the south coast of England, the air of which is pre-eminently of the character just described, and which has obtained celebrity as a winter resort for phthysical invalids.

The physical characters of the atmosphere of this district, comprising chiefly the south coast of Devon, and the kind of pulmonary affection to which it seems most suitable, as set forth by Sir J. Clark, have been already given. The observations of Dr. Shapter, of Exeter*, are of a like kind, for this physician gives as the result of his very extensive experience of the climate of the south-west coast, that it appears to act favourably in cases of great pulmonic irritability, sometimes found associated with the onset of tubercular disease of the lungs. In cases also of inflammatory or gastritic dyspepsia, the climate usually suits well, especially if this form of dyspepsia be associated, as it frequently is, with a harsh, dry, inactive skin, for the warmth and humidity of the air tend to encourage that transudation from the skin which is the result of the vital action of the cutaneous surface itself.

* Dublin Med. Quarterly, 1863, p. 441.

The relief also which the lungs experience from the free action of the skin is great, for matters are thus safely eliminated from the system which would otherwise be deposited on the lungs to form tubercles. The observations of Mr. A. Toulmin, in "The London Medical Review," February, 1861, on the functions of the skin in reference to tubercular consumption, may be here named as worthy the attention of all those interested in the prevention and cure of phthisis.

Rullmann, in "The Dublin Journal of Medicine," for 1861, considers that the mild climatic sanatoria of southern districts are useful as winter residences in the chronic bronchial catarrh and chronic tuberculosis of patients from more northern districts. Summer in these regions is often most injurious by developing and aggravating pulmonary mischief.

The same writer goes on to say, that the cases best suited by a moist and warm climate are attended by a very sensitive condition of the bronchial mucous membrane, frequent cough, dry, or possibly attended with viscid expectoration, and an excitable state of the vascular and nervous systems.

In the appendix to the second edition of his excellent "Treatise on the Diseases of the Heart and Lungs," Dr. Walshe mentions the Azores, Rome, Pisa, Pau, Torquay, Penzance, as climates of soft, relaxing character, with moderately high thermometric range, and most suitable to pulmonary and cardiac affections, attended with dry bronchitis and a dry irritable skin, with very little disposition to general constitutional languor.

Thus it appears that authorities agree pretty well as to the use to be made of a mild relaxing climate in the treatment of pulmonary affections.

As a winter resort, a mild and equable air is soothing to an irritable chest, and possesses the advantage of enabling the invalid to get out-of-door exercise daily, without being exposed to a sudden alteration of temperature on quitting his warm apartment; and this is a matter of no light moment, for when the phthisical invalid is obliged to keep within doors, and so get but little really fresh air through his lungs, his actual chance of recovery is but a poor one, though the local symptoms of pain, cough, and dyspnoea may be mitigated. Correct as I believe the above indications for a mild air to be, as far as actual chest symptoms may go, I would nevertheless urge strongly that these local symptoms be not regarded to the exclusion of other general symptoms and conditions. The climate in which the invalid had been living when his disease first appeared, his own sensations as dependent on the air in which he dwells, the progress to better or worse that he is making, the condition of the appe-

tite, digestion, and general nutrition, the action of the skin, and other secretory functions, and the mental and moral aspects of the case, must all be anxiously considered in selecting a resort for the phthisical invalid.

If, perchance, the consideration of all these items should issue in doubt and hesitation between a place, dry, warm, and bracing, and one humid, mild, and relaxing, I would, for my own part, unhesitatingly decide then for the former, as the air most likely to do general good to a system depressed by disease, while the other is, what may be called, a medicinal climate, suitable to a limited class of patients, and to them only during a limited season of the year.

With respect to the actual localities, where a mild and equable climate can be best obtained, no part of the English coast can compare to the south of Devon, and the remarks made in the former part of this paper on Torquay show the grounds on which this well-known place has been so long and deservedly a winter resort for a certain class of pulmonary invalids. Other parts of this coast have a certain amount of name, but, as I have said already, they are exposed to fog, and have an atmosphere much more decidedly moist and humid than that of Torquay; and any one who will take the trouble to visit these places, and converse with patients who have tried them, will, I think, come to the conclusion that in cases where a mild soothing winter climate, dryness of soil, and yet enough humidity in the air to temper this to the requirements of an over-sensitive bronchial membrane is truly indicated, no place can surpass Torquay.

Other parts of the south and south-east coast are well-known resorts for the phthisical, and, though mild and warm, have not the decidedly relaxing character of the South Devon climate, and are useful and safe climates for phthisical patients. It is hardly necessary for me to name Bournemouth, the Isle of Wight, and St. Leonards, as places drier and more bracing than Torquay and the South Devon district, and adapted often as permanent residences for the consumptive during the year, and not as merely winter resorts. It has been my lot to observe most pleasing and satisfactory results follow on the removal of persons, decidedly phthisical, to the Isle of Wight; and others, doubtless, can bear a like testimony with respect to this and the other places I have named.

The atmosphere of some parts of this coast, as at Hastings and St. Leonards, is very decidedly marine, and the air impregnated with saline matters from the sea is apt sometimes to prove irritating; in these cases, some of the inland parts will be found most beneficial; and, from what I have myself observed, I would mention Clifton as one of

the best inland climates for the phthisical, and, next to that Harrogate. The singular and extraordinary improvement that I have seen sometimes to follow on the removal of a case of advanced or, indeed, what had been called hopeless, consumption, from a southern clime to the strong, bracing air of the north, in more than one instance, has shewn me how much good may be done by a very decided change of climate in cases of most severe phthisis.

The cases in which I have known such decidedly curative effects to be produced by a strong and bracing air, have been those of persons very far gone, according to good authority, in phthisis, and who had been sent to the mildest and most relaxing parts of the English coast, believing that here alone they could exist. One case obtained permission to go for the hot months of the summer to a very exposed and cold part of Hertfordshire, intending to leave for Rome in the winter. The effect of the summer air was so renovating to the exhausted system, that the patient remained in the same spot all through the winter, appetite and strength returned, and by the next summer complete recovery had taken place.*

In another case, a patient who was dying of phthisis, in the most sheltered part of Hastings, left to go to her home in Lancashire with but little hope of continuing her existence, she got perfectly well, and probably remains so now, after the lapse of several years.

The following case will illustrate how a too exclusive regard to the mere local chest symptoms, some years ago, led the writer of this paper into error, in advising a change of climate to an invalid. The patient was a gentleman of experience in climates, tall, thin, and of highly nervous temperament; he had lost a sister with phthisis, and after a rather sharp attack of pneumonia, decided symptoms of the same disease attacked him, and by the advice of Dr. Williams he left this country to travel abroad; he spent the summer in Switzerland, and afterwards went to Rome and to Pisa. I met him at Cannes in the south of France, whither he had come for the winter; he then had a small cavity at the upper part of one lung, a good deal of expectoration, and now and then a little blood tinged the sputa; the appetite and digestion were feeble, and there was a good deal of general debility. The result of this gentleman's experience of climate was to him disappointing and unsatisfactory; at

* Baron Larrey has gone so far as to say that it is a fatal error, or rather pernicious prejudice, to imagine that warm mild climates cure thoracic disease. In the advanced stages of phthisis, atmospheric heat does harm, and accelerates the fatal issue.—*Med. Chir. Rev.*, 1845, p. 59.

Nice he had suffered much from pain at the chest and difficulty of breathing, but, on arriving at Cannes, he improved considerably, and could take and digest a fair amount of cod-liver oil.

Though improving in general health and strength, the lung symptoms did not show much amendment, and it seemed that a change to the mild, relaxing air of Pau might now be a judicious move. The event proved otherwise; and, referring to letters now by my side, which I received on his arrival at Pau, I am struck to see how soon the change of air seemed to produce a bad effect. Langour of system, inability to take the cod-liver oil, and increase of debility, were the prominent symptoms, while, at the same time, the expectoration and cough increased, and things turned quite for the worse. In this instance the patient felt convinced he should do better and feel his chest easier in a milder air than that of Cannes, but I shall not be soon persuaded again to let a phthisical invalid, who is feeding well and gradually gaining bodily strength, go from a dry, bracing air to one that is relaxing and mild, because he may at times fancy the former to be rather trying to his chest. In the instance of another patient, of whom I have lately heard, a similar change was followed by quite as unfavourable a result.

The change from such a climate as that of Cannes to the truly sedative air of Pau is a decided one for an invalid, as will be seen by comparing the climate of Pau with that of Cannes and Provence generally.

Pau stands on a gravelly soil on a sort of terrace facing the Pyrenées, and is very completely protected from winds, hence, as Sir J. Clark observes, "calmness is the striking character of the climate." The mean annual temperature is four and a half degrees higher than London, and the average rain fall at Pau is 40 inches, while in London it is 27. Notwithstanding this large fall of rain, the ground from the nature of the soil dries fast, and the air is not reckoned damp, for steel articles do not rust, and uninhabited houses never show any signs of damp.*

The climate of Pau is very equable, and in this respect it is superior to Rome and Pisa. In diseases attended with an atonic relaxed state of system, it is a climate likely to act prejudicially. A very different climate to that of Pau is found on the coast of Provence lying east of Marseilles.

The general nature of this climate is that of a dry warm air, with more or less of stimulating and exciting quality; an

* Dr. Taylor on Climate of Pau, 2nd Edit. 1856.

admirable climate for cases of phthisis and chronic bronchitis, attended with copious exhausting discharge, and much general atony of system, but severely trying to nervous and excitable persons, bringing on often an actual attack of nervous fever in those who do not modify their habits of diet and regimen to suit the peculiarities of this exciting climate.

Of the individual places along this coast, it is in the part of Nice lying nearest to the sea that the most exciting air is found, and here, too, the temperature is apt to vary considerably; so that it does not appear the best of places for the pulmonary invalid. A patient who had passed a short time at Nice for the benefit of a pulmonary complaint, told me not long ago, that on quitting the place for Cannes, she found, after crossing the Var, the air so much more agreeable to her chest, that she could not help remarking to her companions on the ease and comfort she felt; a foreigner, who seemed to have made the journey before in company with English invalids, told her he had frequently heard similar expressions of relief from those who were quitting Nice for the somewhat milder air of Cannes and Hyères.

At these two last-named places, and especially at Hyères, we find an air dry, warm, and exciting, but more equable and not so highly stimulant as the air of Nice. It is an air eminently suitable to cases of phthisis attended with profuse secretion and much langour and exhaustion of system; it is, moreover, highly beneficial to cases attended with sluggish circulation and tendency to glandular enlargements and tumours.

Dr. Mc Carthy, of Paris, has informed me of a lady under his care for most obstinate swelling and ulceration, some considered even of malignant kind, of the cervical glands, who obtained a complete cure after a few months spent at Cannes.

In case of confirmed and advanced phthisis the effect of the air of Cannes, as a climate intermediate between Hyères and Nice, is most satisfactory, many cases recovering completely from a most serious state of chest disease. M. Girard, the chief Pharmacien of Cannes, was in his youth, when a student in Paris, given over by Louis, as a case of hopeless phthisis, and advised, as he valued his life, to migrate to the south; he did so, and is now strong and healthy, and able to carry on a large business at Cannes, and is the author of a work "*Cannes et ses Environs*," in which will be found much useful information from the pen of Dr. J. C. Séve, and also from that of Dr. Whitley, the English physician at Cannes. Speaking of Cannes, Dr. Séve, says: "*Il semble vraiment*

que cette résidence ait été créée tout expres pour les portrinaires, lymphatiques, et scrofuleux;" and he records several instances of remarkable recovery that he has seen effected by this climate in most severe cases of phthisis. Some of these patients, it is noticed, were quite unable to remain, though but for a few hours, near to the sea, for the air, even of a calm, tideless sea like the Mediterranean, seemed too irritating and exciting for them; it caused cough, pain, and hæmoptysis, all of which unpleasant symptoms were relieved as soon as the patient got among the pine woods on the surrounding hills.

The late Dr. Davis remarked long ago how the people of Provence and Nice always removed their pulmonic invalids from the sea coast to place them among the pine forests on the hills, where they might inhale the balsamic emanations from these trees.

I must refer my reader for further information respecting the climate of this coast and the Riviera to very useful and instructive accounts of the district, and of Mentone in particular, given to us by Dr. Henry Bennet and Mr. Price.* With respect to the general immunity of the district from phthisis, I would just quote the experience of M. Richelmi, who for thirty-four years practised among its inhabitants; he reckons the population of Monaco, Mentone, Villefranche, and St. Remo, and some other places on the coast, to amount to 76,000 souls, and of 7,000 deaths in this number, only 107 were due to pulmonary consumption.

Other climates, somewhat similar to that we have just been describing, may be met with at Malaga, Malta, and Algiers. I have heard phthisical people speak very highly of these climates, but the absence of the usual comforts of home has been named as a drawback and annoyance that, in the opinion of some, outweighs any peculiar advantages of climate.

The climate of Madeira is well known by reputation as a warm winter resort, neither stimulating nor relaxing; and a few winters passed in this island have often enabled the subject of threatened consumption to overcome the morbid tendency of his system.

The climate of the Nile about Cairo and Thebes is warm, dry, and equable, though at times cold winds are

* "Mentone and the Riviera as a Winter Climate," by J. Henry Bennet, M.D. 1861. "The Climate of Mentone," by P. C. Price, Esq., F.R.C.S., Med. Times Gazette, 1862, pages 53—78. Also the "South of France," by Dr. Edwin Lee, and a very inviting description of the country of the Riviera, by the Dean of Canterbury, will be found at page 243 of the March No. of "Good Words."

felt, and the patient on arriving first at the river is apt to suffer from transient disturbance of the digestive and biliary functions, especially if, in spite of the wise advice of Dr. H. Bennet, he has been travelling in the "cannon ball style," making the transition from one climate to another with more haste than wisdom; but when used with reasonable precautions the climate of the Nile can do something certainly towards overcoming a very decided tuberculous tendency in the chest, as I have observed in a well-marked instance.

In the case of a clergyman afflicted with most severe and persistent bronchitic asthma, and utter loss of all appetite and strength, the air of Cairo and the Thebaid proved most beneficial, though by the moist air of Alexandria this patient's distress was much increased, and his dyspepsia seriously aggravated. Another phthisical patient, whose sufferings were aggravated during a winter at Madeira, removed to the Thebaid with most prompt and decided benefit.—See Rev. T. Barclay, in "Edin. Med. Surg. Journ.," 1854, p. 656.

In conclusion, I would commend the study of climate and its effects on invalids, pulmonary and other, to the investigation of those who, in these days of facile locomotion, are lead to visit various parts of this and other countries. Meteorological observations, highly interesting and useful as they are, should not be the exclusive means of investigation, but to these should be added carefully recorded results of the way in which invalids eat, drink, and thrive, under certain conditions of climate, "as yet we are," to quote the words of Dr. Walshe, "wanting in precise observations on invalids themselves, and till this want be supplied, attempts at fixing the climate fittest for any particular form of disease must often result in disappointment. Nevertheless, some general truths have been acquired to guide us, and one of the most important of these appears to be, that the anatomical condition and presumed intimate nature of the affection are less faithful guides than the state of the organism generally, and the liking of the individual, in the selection of a dry and bracing or a moist and relaxing climate."

On Apnea from Chloroform, with new means of Prevention of Accidents. By CHARLES KIDD, M.D., M.R.C.S., Associate Member of the Surgical Society of Ireland; late Physician to the Metropolitan Dispensary, &c.

It seems so desirous at present that we should enlarge the circle of our discussions, or examination of the general sub-

ject of the administration of anæsthetics, so as to gather in the stray facts or ideas on this most important series of agents; it seems also such a practical matter of detail and observation rather in hospitals than anywhere else, that the author has deemed it of great utility that, previous to any theoretical or judicial decision, some opinions that may possibly have been omitted may be collected.

The large number of fatal accidents, indeed, of late (so much to be deplored), invests the subject with a degree of serious interest that it had scarcely attained in former years. Several cases have occurred under the author's cognisance, though none have happened to himself, where the medical attendant or surgeon, or both, have been put through the trying ordeal of a long cross-examination by the non-medical coroner and jury, and patient's friends, as to the exact amount of chloroform that is considered for adults an over-dose; the necessity of attending to the condition of the heart, or not attending to it; the culpability of not watching the pulse, or neglecting the Marshall Hall "ready method," or some form of special inhaler in the administration; whereas it must be obvious to every practical surgeon, that what would be an over-dose for one patient in a particular state of weak, anœmic fibre, would not be at all of equal use in another patient (exactly alike as to age) in a highly nervous or hysteric condition. And as to the culpability of not attending to the pulse (as to which there was lately a controversy in the morning papers), the advantage is only negative. The truth in these conflicting opinions as to the pulse and heart, and as to the administration of chloroform, has been in reality slowly arriving. The one last of a series, or the one most striking of a series, of efficient causes, is almost certain to get the entire credit or discredit of a fatal accident of any kind in a generalisation, where the immediate chain of causation is in doubt, is the mode of explanation of Mr. John Stuart Mill. It was first observed that some patients died with the chloroform on a napkin to the face, the result and the cause were soon generalised, as the napkin or absence of a silver inhaler. Again, the pulse (as more easily watched than the diaphragm) was noticed more easily to stop in fatal accidents, the stoppage of the diaphragm was overlooked—hence the popular idea of the vital necessity of watching that the pulse does not stop; but it is something like proposing to stop a storm at sea by putting up a storm-signal; the pulse is only a negative indication of danger, the diaphragm stops first; we may guard against the storm, but not stop it.

Some years ago a large sum of money was gained in the

treatment of varicose veins of the legs, for certain drops, instilled or dropped with rare and marvellous caution, one drop at a time on these veins. Well advertised and curiously scanned, the drop or "drops" grew in favour, the "drops" were eagerly watched, but no notice was taken of the fact, that the leg was carefully "put up" also with roller or strips of adhesive plaster, which in reality cured the disease. This is exactly what has taken place in watching the pulse under chloroform, it was simply the one most prominent of a series of efficient causes—the dogma of "fatty heart," as the additional fancy (for it has never been shown in a single one of about 200 deaths from chloroform), came ready to hand as a further explanation; hence the prejudices and errors in the popular mind, and with coroners' juries, and novelists, as to valve disease and fatty heart.

This coroner and London jury, indeed, arguing out of medical books (laid on the table of the court by the coroner himself), and especially as to the words "cardiac syncope," prolonged the medical cross-examination more than two hours, to the serious detriment of the medical man's position in the district, though he was perfectly innocent; and this, added to the misery of having the patient lying dead in one's own house, for whom the surgeon had done everything in the kindest manner, has painfully impressed the author that such scenes are only to be prevented by a more general examination of the subject of chloroform with its contradictory statements.

"Granting or not granting that the pulse comes from the RIGHT side of the heart," was the sapient charge to the jury, "we have sufficient evidence the pulse was neglected, nor was the heart examined by the stethoscope, as it might have been; nor was the Marshall Hall 'ready method' put in force, which is described by reliable journals as infallible in these cases; nor was the administration conducted with a 'Snow's apparatus,' also described in these books as indispensable."

It would be not more rational to blame a medical man for the clot in the heart in a case of death from croup, or to call it "heart disease," as to have said in this chloroform case the pulse or heart was neglected; we know enough, perhaps, of medical trials for malpraxis to be aware that "one such other victory," and one other chloroform accident, would have been the ruin of such a man's reputation and peace of mind. The chief part of the censure being of an imaginative and unfair nature, as to one side of the heart, left or right, being all the same to the jury and court, as the pulse was neglected!

The true explanation of this hasty generalisation as to

the heart, from imperfect statistical facts, lies deeper; the heart's action is stopped, and its right cavities engorged, not on account of the action of chloroform on the *heart*, but the action of chloroform on the *lungs*! If, in one hundred experiments on dogs, rabbits, &c., poisoned by this agent, we find this remarkable fulness of the right cavities, an anterior or antecedent condition has been overlooked, viz., that this gorging of these cavities and the cavæ, is only a species of back current or *remora*, caused by the lungs (in a state of paralysis) not receiving or transmitting this blood. The heart, as a matter of every day observation in animals, so far from being narcotised, is dilated, and strives actively, but in vain, to push forward the large volumes of blood arriving through the veins of the system. The heart is decidedly *ultimum moriens* in these cases; indeed, some good continental physiologists explain the deaths from chloroform by saying there is over-stimulation of the heart! This is probably not true, however. Comparing rather, one group of facts with other groups of facts (systematising our experience), the error of the hasty generalisation that cardiac syncope or paralysis of the heart is the cause of death, is now at once made obvious.

These coincidences in practice, as in the case of varicose veins, illustrate best some of the popular errors of watching the pulse, adopting as infallible some sort of balloon or inhaler; giving heed to every idle fancy, but forgetting the cardinal point *to watch the breathing*. We now have learned to cure pneumonia without bleedings, which bleedings previously were considered the *sine quâ non* remedy; but they were only the most striking or showy of a series of remedies. We used to pass a red-hot iron round the hip joint in "morbus coxæ," then set it straight and place it in a splint. The red-hot iron got the credit of the cure; it was the most feeling, showy, and important measure, but the undoubted cure is due rather to the splint and readjustment of the parts. These coincidences, that have so misled some practitioners, abound in practice and the entire theory of chloroform, or anæsthetics, and till they shall have been discountenanced no advance can be made.

(1.) A few new facts of recent observance are now to be submitted for consideration,—common-place though all such facts of "minor surgery" must appear, but still eminently practical. It is most desirable in the safe administration of chloroform that the patient's head and neck should be well exposed and free; the head preserved *as quiet* as possible. There is what seems a psychological necessity for the latter; for if the head be not kept still, or if the face knocks about,

or hangs over the edge of the operating table, the patient has horrible dreams, then plunges to avoid them, if a cataract operation, to wit, he vomits violently, with what advantage to a delicate cataract extraction, or "vitreous," or the misunderstood and imprisoned iris in an iridectomy case, our surgeons in that department can decide; this is prevented by keeping the head at rest, and handling the head with the utmost gentleness, and having the stomach empty.

(2.) Again, it is of little use to strive to rouse up a flagging pulse but through the lungs and diaphragm; not by violent strong ammonia, but by gradually substituting ether for the chloroform, and with a lady's fan fanning the patient so as to excite the respiratory nerves on the surface, as dashing cold water is too depressing an agent.

(3.) Surgical operations in the *morning*, rather than in the afternoon (where practicable) are to be desired; as in the morning, after a night of refreshing and reparative sleep, there is less chance of nervous exhaustion; the "snoring" under chloroform the author believes to be caused by exhaustion and a tendency of the patient simply to go asleep—the sleep of ordinary life not being at all the same as the state of chloroform with absent excito-motor action of cord and medulla—and thence there seems to be no doubt, too, that in delirium tremens or mania cases, a state of exhaustion without sleep precludes the safe use of chloroform, but if sleep shall have been once obtained, then chloroform comes in very well; thus, a man of intoxicated habits, or in delirium tremens, may sustain a very severe compound fracture, and, brought to hospital, immediate amputation with chloroform will come under consideration; but sleep for a short time, with antimony, morphia, wine or hot coffee to tide the patient over the "shock," is first to be recommended. Several delirium tremens patients (we should never forget) from exhaustion have fallen dead at the first "whiff" of the chloroform; but in the Registrar-General's reports it reads "death from the fracture;"—this is seen, and is, perhaps, the chief or only new feature as to chloroform, from the enormous wounds and fractures caused by the ponderous artillery of the American war; while in the Crimean war, where more caution was observed and intoxicated soldiers in the field very rare, chloroform was used 20,000 times, by the French alone, without one accident. Reference is here made to syncope or exhaustion from want of food, &c., so often joined to (if not forming part of) the disease known as acute delirium tremens. There, indeed, chloroform requires extra caution always on the part of the surgeon; but there is a state of apparent exhaustion in chronic cases—women, for instance, to be operated on

for ovariectomy; there the "law of tolerance" of chloroform of Miller is very marked indeed, and such caution is not needed.

(4.) It appears very desirable that the uses of chloroform should be widely known amongst students and in general practice; indeed, it may be a question if constituting it a "speciality" by paid chloroformists in hospitals, is not a retrograde step. Thus, the author has known bad hernia cases strangulated sent to hospitals twenty or thirty miles, to be operated on, after trial of various measures out of doors; but the hernia at once reduced by chloroform, which the practitioner, not a specialist, was afraid to administer before the patient was thus sent, sometimes by railway, to the hospital.

(5.) In midwifery practice, where there is rigidity of parts and much pain, chloroform has proved a most beneficent agent, a real charity to the agonized sufferer; it not only facilitates the recovery of the patient, but has nearly superseded the use of forceps by facilitating "versional delivery." Here indeed we may say with Hippocrates—

Divinum est opus sedare dolorem.

(6.) In medical cases, such as epilepsy, puerperal mania, tetanus, asthma, chloroform has now been used extensively, with apparent good results. In epilepsy also, certainly without these accidents that theory would point out. In tetanus chloroform in *full* doses is a most valuable *auxiliary*. It saves pain or spasm, and assists materially in helping the patient to swallow nutrients and wine, so essential to the treatment. Twenty-two cases thus cured are recited in "The Medical Times," 1861; sixty in the wars in Italy. In irritable bronchitis, whooping-cough, or asthma, chloroform acts like a charm.

(7.) Sulphuric ether as an anæsthetic has been carefully studied by the author. It is very desirable as an anæsthetic to be *held in reserve*, to give alternately with chloroform, where there is a tendency to syncope or weak pulse. The intoxication, however, under ether is more deep, like that from alcohol, and resuscitation in accidents most difficult. Ether is, perhaps, a slight degree less dangerous than chloroform.

(8.) A singular spasm of the glottis, according to Schiff and Rosenthal, stops the action of the diaphragm. This spasm the author submits for consideration, as what he believes the most frequent cause of apnea.

It appears, indeed, that if in practice we are to be saved from the often undeserved censure of the coroner's court or public press already referred to; if we be anxious (as every one in the profession is anxious and eager) to see less in number of these accidents, though the truth has been slowly

arriving, that we must still keep on a level with the advancing series of clinical facts and physiological discoveries. Some words, such as "cardiac syncope," "fatty heart," and the like, are like old coins, curious, and useful at one time, but now no longer admitted to pass current.

We may not now believe, as we did once, that the napkin pinned into the shape of a cone is the cause of death in all cases, but are we so sure as to the best form of inhaler, or as to "Mixtures," or the proper doses of chloroform? Are we careful enough to entrust the administration only to experienced hands?

We have been hitherto watching the pulse under chloroform, or one person has administered the chloroform, and another "taken charge" of the pulse; but it is of great moment to know what is the *rationale* of this, or whether paralysis of the heart is the immediate cause of accidents, as so generally believed.

The utmost confusion exists in books and medical schools as to this, and what is best to be done at the operation table in impending accidents or deaths; as also to this "cardiac syncope;" also as to what is the true explanation of the usefulness of ether? When have we to fear apnea? How does apnea differ from syncope? And what is this "Faradization" form of electricity now found so valuable? This explanation the author wishes to indicate, or submit further to the more enlarged and general appreciation of the readers of this practical journal, as well as a short abstract of the case (or rather five cases of persons restored to life, though pronounced dead otherwise!), the immediate subject of the communication.

(To be continued.)

Remarks on Lithotripsy: with Record of Fifteen Cases of Stone.

By WALTER COULSON, Esq., F.R.C.S., Surgeon to the Lock Hospital, &c.

[Continued from page 201.]

IN the "Medical Mirror" of last month I gave the history of fifteen patients who had been operated on for stone in the bladder, and on these cases are founded the observations which follow. They will partly relate to symptoms; more to treatment. I do not intend to describe minutely all the different symptoms which together indicate the presence of stone in the bladder. I shall simply attempt to point out facts which have had interest for myself, and to explain considerations

that have given increased precision to my own power of forming a diagnosis. I would refer to the order in which symptoms occurred in these cases, and to the fact that this has been different in different individuals. In two the first symptom that attracted attention was the presence of blood in the urine after a special form of exercise, disappearing on rest and unaccompanied by marked uneasiness. Subsequently slighter causes sufficed to induce the bleeding, increased frequency of micturition came on, and an uneasy sensation in the glans penis and bladder. In another class of cases pain was a prominent symptom from the first, before or after passing water or at both times; blood appearing later or not at all. In some, again, frequency in passing water and repeated disturbance at night are the first inconveniences complained of; and while cystitis with its consequences, muco-purulent urine, etc., supervene early in some, in others they do not occur at all, or only after a considerable time. This diversity is to be accounted for by various circumstances, and especially by the habits of the patients.

A classification of the symptoms and a consideration of their respective causes will afford the best explanation, and will at the same time show the relative value of the various signs. Some symptoms are direct, produced by the mechanical effects of the foreign body on the mucous membrane of the bladder, and, as such, are influenced by mechanical conditions, such as exercise, posture, etc. These, when consistently declared, are among the most valuable and unmistakable signs of stone, and are rarely altogether absent. Among these is hæmorrhage, under the special circumstances likely to give rise to abrasion of the mucous membrane by the stone; *i.e.* violent jolting, horse exercise, driving, etc., the bleeding following on all occasions and disappearing on rest. It must of course be ascertained that the blood does not come from the kidneys. Another of these symptoms is pain; the most characteristic is that at the end of the penis,—usually it is constantly more or less felt; but there are exacerbations when the stone is brought in contact with a certain part of the mucous membrane by change of position, or when it is compressed by the bladder contracting on it at the end of micturition. Besides this there is commonly more or less uneasiness in the bladder itself, or weight and pain in the perineum, also influenced by exercise, posture, etc., for example, pain on turning in bed. Another form of pain less characteristic is that experienced on sitting down. The sudden complete stoppage in the flow of urine is not so common: when present it is almost pathognomonic. Some one of these symptoms have formed a prominent feature in

all the cases that have come under my care. There is no single one of them, the absence of which I should consider to exclude the possibility of stone, though without some of them I should not deem myself justified in sounding until all ordinary remedies had been tried. We may, of course, have in other affections of urinary organs pain in the bladder, and at the end of the penis, blood in the urine, etc.; but take them one by one, follow them closely and mark well when and how they are produced, and the surgeon will be generally able to make out pretty clearly whether they can be accounted for by the mechanical action of a foreign body.

Another set of symptoms are those of bladder irritation, frequency of micturition, forcing and straining, with urine ammoniacal and containing more or less mucus or pus. Or there may be paralysis of the bladder, sometimes a cause, sometimes a result of stone. These symptoms are among the most distressing of those occasioned by stone; but as they are not of themselves characteristic, they have little diagnostic value, unless accompanied by some of those belonging to the class first named.

When from the symptoms the existence of a foreign body in the bladder is suspected, an examination becomes necessary. As this often gives rise to pain, I am always unwilling to undertake it, unless the evidence from the history is strong, and such being the case, the surgeon is bound to make it as thorough as possible. To one in the habit of performing lithotrity, the sound is an unsatisfactory instrument. In endeavouring to elicit sound by striking the stone, the bladder is subjected to certain concussions occasioning pain and irritation, whilst in the best hands failures repeatedly occur. I, therefore, always examine when I have the option with the lithotrite, especially where previous examinations have been made unsuccessfully, and I have been assured that this has occasioned less pain than previous soundings. I shall describe the operation of lithotrity, and will not, therefore, say anything respecting the examination, which is precisely similar.

The method of operating, I prefer, is that introduced by Civiale, which, in my opinion, presents many advantages over the operation as commonly practised in England. In this last mode the instrument is introduced fairly into the bladder, the convexity is pressed on the floor so as to cause a hollow at this part, and the blades are widely opened, the stone, rolling to the lowest point, comes within their grasp, is secured and crushed. It is sometimes necessary to give the instrument a smart shake in order to dislodge the stone. This proceeding always occasions great pain and severe

shock to the patient, and after the first crushing a sharp fragment may at any time get behind the instrument, and by pressure be made to lacerate the mucous membrane of the bladder.

The essential difference in the French operation is that instead of the lithotrite being pressed against the trigone so as to produce a hollow, into which the stone may roll, the instrument avoids contact with the vesical walls, and its blades are directed in search of the calculus. In one it is attempted to make the stone come to the instrument, in the other the instrument seeks for the stone. The patient being placed in the lithotritry posture, the instrument is passed into the centre of the bladder. I apply the term first position to that which it occupies when first introduced; *i.e.*, with convexity of instrument towards the trigone. In this position the blades are opened and are then allowed to fall half over to the right or left side and closed. If the stone is not included, the instrument is brought back to the first position, the blades are opened as before, turned to the other side and again closed, care being taken that the axis of the instrument is still maintained in the median line. In this way the central part of the floor of the bladder is explored. To examine further than this from the middle line, the instrument should be again opened in the first position, turned laterally, and gently swept over the floor of the bladder until the convexity of the instrument is brought close to the concavity of the right side of the bladder, so that the sides of the blades should all but rest against the extreme right of the floor of the bladder, the points of course being directed inwards; the blades are now closed. The movements are repeated, if necessary, on the opposite side, with the same precautions. These manipulations will certainly find a stone when present, unless the prostate is so large that a pouch is formed behind it. When this is the case, the instrument is opened and turned round until the open blades point towards the trigone, the handle of the instrument is then raised until the lithotrite just touches the floor. When a stone is seized during any of these manipulations, the instrument should be brought back to the first position, and there crushed. The fragments will then fall immediately under the lithotrite, and a half turn of the instrument, without any lateral movement, will be sure to include some of them.

The first practical point that has been impressed on my attention, is as to the preliminary injections of water commonly recommended, and as to the quantity of fluid the bladder should contain before the operation. My own experience leads me to agree with Mr. Henry Thompson, in

not injecting, as a rule. I always direct the patient not to pass water for an hour and a half or two hours before the operations, in which time a sufficient quantity will have accumulated. It is necessary, however, to ascertain previously that the patient has the power of emptying his bladder, otherwise no idea can be formed of the quantity of urine present. I may take this opportunity of stating, that it is rare for a patient, who has long suffered from stone, completely to empty his bladder, an ounce or more often remaining behind in cases when there is no paralysis and no enlargement of the prostate. The urine having been retained for a couple of hours, the lithotrite can be introduced, and the operation be proceeded with at once, avoiding thus the prolonged manipulations that add materially to the fatigue and shock of the operation. This is especially of importance in cases where the bladder is very irritable, in which, from the fact of urine being passed so frequently, injection has been considered absolutely necessary. It will be better to prepare the patient by a dose of morphia, and take your chance of the quantity of urine he may be able to retain. I would refer here to Case No. 7,—an extreme instance of difficulty from this condition of bladder. This patient passed water every half hour, and incontinence of urine resulted whenever he attempted to retain it longer; although I tried more than once, I could never succeed in injecting an ounce of fluid.

As to the quantity of fluid in the bladder for the operation, five or six ounces is usually recommended, but I should prefer having four; (or three ounces, when the larger quantity is in itself a source of uneasiness); I thus take the sensations of the patient as my chief guide; in most cases four ounces can be retained with ease, and this is quite sufficient to allow of every manipulation. A stone will sometimes be missed in a bladder greatly distended that might otherwise have been seized.

In Case No. 14, when I made my first examination the bladder contained ten ounces of water, and to this, together with its extremely sensitive condition, I attribute my failure in detecting stone. The two circumstances that render a larger quantity of fluid necessary, are a rugous bladder, and an unusually large stone. I have at the present time a patient under my care with a stone, the transverse diameter of which measured over an inch and a quarter; with the usual quantity of water I found it impossible to open the blades sufficiently wide to seize it, although two days afterwards I caught it without difficulty, the bladder containing at the time six ounces of water.

Another important matter for consideration, in my opinion, is the amount of work to be done at the first operation and at subsequent sittings, and the length of the intervals to be allowed between them. My practice is to content myself, in the first instance, with once fairly crushing the stone. In this way, one obtains an insight into the constitution of the patient, and learns how the bladder will tolerate operative interference. Sometimes great delay and much suffering are occasioned by attempting too much at the commencement. The first operation and its results will form a guide as to the subsequent treatment. After a cautious experiment in the first instance much more can be afterwards done with confidence. As a rule, after the first operation the instrument may be kept in the bladder for five or six minutes without occasioning marked distress, and in this time many fragments may be crushed. With respect to the interval to be allowed between the different sittings, I usually give about four days between the first and second, afterwards I am influenced mainly by the coming away of the detritus. After an efficient crushing, so long as the *débris* continues to escape in considerable quantity, it would be useless to do more, but as soon as this ceases to be the case I again crush. In some cases the relief from pain, diminution in the amount of mucus discharged, and amelioration of all symptoms after one or two crushings is remarkable,—often before any considerable portion of the calculus has been passed. I conceive that the explanation of this is, that the stone, having been reduced to fragments, no longer presents the same obstruction to the passage of the urine, or perhaps a portion of the mucous membrane, long irritated by constant contact with a foreign body, is relieved, and the straining is consequently diminished. Sometimes, however, the converse of this occurs, and this is especially liable to be the case when the stone has previously occasioned but slight pain or irritation. It then becomes a question whether, when the first or second operation is followed by increased pain and frequency, with large secretions of mucus or the presence of blood, this is to be considered as an indication for desisting from operative interference for the time being, or whether it is not, on the contrary, a strong reason for proceeding with the operation with as little delay as possible. My experience has dictated to me the following practice.

If the pain and other symptoms have begun distinctly to diminish before the usual time for another sitting, I give another day or two for their further subsidence. If they continue, and especially if there are rigors and much pain of a cutting character, the cause is almost certainly irritation by

angular fragments, and I am inclined rather to anticipate by a day or two the usual period. I have done this on several occasions with marked benefit, and have at other times had to regret that I have not resorted to it. These remarks, however, do not apply where a large calculus has been broken; here the disturbance after the first crushing is sure to be great, in consequence of the angular points of three or four large fragments, and it is found impossible to open the instrument wide enough to seize them without at least four ounces of water being present, which quantity the bladder is unable to retain.

There is one more point which I consider of the greatest importance, and on which there is still some difference of opinion. It is whether, under any circumstances, an attempt should be made to bring away fragments in the lithotrite, or scoop. This I unreservedly condemn. Fragments cannot thus be removed without great risk of lacerating the mucous membrane of the urethra, or of the neck of the bladder. This does not merely cause pain and constitutional irritation, but often more serious mischief by entangling fragments which would otherwise pass freely, and thus giving rise to impaction, and sometimes to extravasation of urine. Sir B. Brodie, in a paper on Lithotritry, vol. xxxviii, "Med. Chir. Trans.," mentions four cases in which this practice was followed by extravasation and urinary abscess, and two of these patients died, notwithstanding the abscesses were freely opened. I have seen a case in which a small calculus was removed entire in the lithotrite without being crushed. There was laceration of the prostatic portion of the urethra; this occasioned great pain at the time and it has left a persistent tenderness which now, after a considerable interval, renders the introduction of an instrument exceedingly painful at this part.

The use of the scoop, or non-fenestrated lithotrite, is, however, most valuable, when the stone is phosphatic and soft, and the bladder is in such a state of atony that it does not expel its contents. Here the material brought away should be so compressed between the blades of the instrument as to be in a state of powder, and free from any angular fragments projecting beyond the instrument. The instrument may be freed from these fragments easily enough in the following manner: some dozen half-turns should be made with the screw of the instrument; by this means, the contents of the scoop are alternately compressed and released. In this way a good deal may be removed without distressing the patient, and occasionally it may be advisable to introduce the instrument more than once at the same sitting. This would

only be necessary when the patient had not the power to empty his bladder, and it is only in cases of this kind that I ever wash out the bladder for the purpose of getting away débris. Mr. Thompson, in the "Lancet," February 20th, has laid stress on this point, on which I had insisted in a paper that I read at the Medical Society, January 25th.

I have not considered it necessary in this communication to give the reasons which lead me generally to prefer lithotritry to lithotomy in the adult. I may simply state my practice, viz., that in children I always perform the latter operation; and that, in all patients above the age of puberty, I prefer the former. In the fifteen cases detailed I have only found two in which the crushing operation was inapplicable,—the one a patient suffering from paralysis of bladder, with eleven calculi, the other a patient with the same condition of bladder and two calculi, one of which was encysted.

REVIEWS AND NOTICES OF BOOKS.

On Diseases of the Heart and Great Vessels; their Pathology, Physical Diagnosis, Symptoms, and Treatment. By HENRY WILLIAM FULLER, M.D., Physician to St. George's Hospital, &c. Octavo, pp. 247. London, Churchill. 1863.

THIS book consists of those portions of Dr. Fuller's larger work on Diseases of the Chest, which relate to the diseases of the heart and the great vessels, and which have been published in a separate form for the convenience of persons who may wish for information upon cardiac affections only. It is divided into two parts; the first treats of the principles of physical diagnosis as applied to the investigation of diseases of the heart and large vessels, and the second comprises a description of these diseases, their pathology, symptoms, and treatment.

After a short preliminary chapter upon the regional anatomy of the part of the chest in which the heart is situated, the author discusses, *seriatim*, the diagnostic inferences to be drawn from ocular inspection of the chest, manual examination, percussion, and auscultation. Many of his views are contrary to those ordinarily expressed by writers upon the same subject. Thus, in discussing the various possible causes of the auscultatory sounds which are heard in connection with the systole and diastole of the heart, he assigns the first, or systolic sound, almost entirely

to the sudden and forcible closure of the mitral and tricuspid valves; this view was first propounded by Dr. Billing, and has received the sanction of many eminent continental physiologists, although it was comparatively little supported in this country until Dr. Halford (now Professor of Anatomy at the Melbourne University) showed, by some ingenious experiments, of which an account will be found in his pamphlet "On the Action and Sounds of the Heart," that the sudden tension of the auriculo-ventricular valves is the chief, if not the sole, cause of the first sound. The other causes to which this sound have been attributed are:—1. The muscular contraction of the ventricles; this is the principal cause, according to Hope, Williams, Walshe, Stokes, and Davies. 2. The rush of blood over the surface of the ventricles, and through the aorta and pulmonary artery, and the throwing back of the semilunar valves against the sides of the vessels, the dilatation of the vessels themselves, and the molecular collision of the blood. 3. The impulse of the heart against the walls of the chest. Dr. Fuller furnishes powerful arguments against the probability of the systolic sound being, in any great measure, due to either of these three causes.

Again, as regards the causes of the second, or diastolic sound. Several possible sources of this sound have been enumerated by authors, but of these only one, viz., the sudden closure of the semilunar valves, appears, according to the author to exercise any influence in the production of the second sound.

In the chapter on pericarditis, Dr. Fuller adverts to the circumstance that rheumatic pericarditis was formerly supposed to be due to metastasis, *i. e.*, to the retrocession of the inflammation from the external parts, and its transference to the membranes of the heart; and he adds, that more recent observations have fully demonstrated that this theory is wrong, and that either exocardial or endocardial inflammation may occur as the first, and for some time even the only, local manifestation of the disease; that it sometimes precedes by several days the redness and swelling of the joints; and that, even when it does not occur until after the articular inflammation has presented itself, its invasion is seldom accompanied by any diminution of the previously existing affection of the joints. It consequently follows that pericarditis is due to the poisoning of the blood. Similarly, from the circulation of impure blood, non-rheumatic pericarditis may be set up in the course of various constitutional disorders, such as scarlatina, variola, cancer, and peritonitis; or it may arise in connection with local irritation excited by disease in neighbouring parts, as in some affections of the

chest. Rheumatic pericarditis is always attended by more violent symptoms than the non-rheumatic variety, which often occurs in a latent form without the presence of any marked local symptoms; still, the mortality of the latter variety is greater, owing to the fact that it usually constitutes one of the final complications of some otherwise fatal disease; death results in the majority of the cases of non-rheumatic pericarditis, and in one only out of every six cases of the rheumatic variety of this affection. Of the various symptoms which sometimes accompany pericarditis none are more deserving of notice than those rather rare symptoms which depend upon disturbance of the cerebro-spinal functions, and which are primarily due, not to metastasis, as was at one time supposed, but to toxæmia. When delirium and choreic spasm come on, they always denote great danger. The treatment of pericarditis is always difficult. The objects to be kept in view are, first, to remove the morbid condition of the blood; secondly, to subdue the local inflammation; and, thirdly, to get rid of the products of inflammation. The treatment adapted to fulfil the first object, depends, of course, upon the nature of the individual case; in rheumatic pericarditis, it is to be accomplished by the administration of alkalies and alkaline salts. The second indication is to be met by bleeding, calomel, and opium; and the third by blisters, diuretics, and absorbents. The author is an unflinching advocate of mercury, and, in fact, goes so far as to say that "no case of pericarditis occurring in a strong and healthy person, can be safely treated without mercury."

Inflammation of the lining membrane of the heart, Endocarditis, is a more common disease than inflammation of the external membrane. Owing to the small per-centage of deaths in the earlier stages of endocarditis, the pathology of this disease is rather obscure; but the first effects of inflammation of the endocardium are great vascularity of that membrane, with a swollen state of the valves, and, sometimes, exudation of transparent lymph or deposition of fibrin upon the valves. After a time the vascularity becomes diminished, the exudation becomes partially absorbed, the fibrinous deposits are very firmly adherent to the valves, and the lining membrane itself, which is normally transparent, is changed in appearance, and becomes white and opaque. The fibrinous vegetations are usually confined to the valves, the aortic and mitral being particularly affected, but they are sometimes to be found in all the chambers of the heart, and especially in the left auricle. The treatment of endocarditis does not differ much from that of pericarditis, excepting that ammonia or its salts should never be omitted; the great

value of these preparations is due to the circumstance, as was first pointed out by Dr. Richardson, that ammonia possesses the property of holding in solution the fibrin, from the deposition of which upon the valves the chief danger is to be expected. In addition to alkalies, or other remedies, we must order opium, wine, and diffusible stimulants, if there be a tendency to sinking, with weak pulse and delirium.

Inflammation of both the internal and external membranes of the heart, endo-pericarditis, is not unfrequent. The author states that, taking rheumatic endo-pericarditis alone, he met with 27 cases of this form of disease amongst 114 patients suffering from recent rheumatic heart disease; 12 of the other 87 cases being examples of pericarditis, and 75 of endocarditis. Endo-pericarditis was present in 10 out of 54 cases of non-rheumatic cardiac affection under Dr. Fuller's notice at St. George's Hospital.

The chronic diseases of the valves and orifices of the heart are very frequently connected with the deposition of fibrin, but they may also arise from malnutrition and chronic textural degeneration. The orifice which is most usually affected is that of the aorta, obstruction of the aortic orifice being a common form of chronic valvular disease; obstruction of the mitral orifice is comparatively rare, and obstructions of the pulmonary orifice or of the tricuspid orifice are very seldom met with. Regurgitation through the mitral orifice is, according to the author, the most common form of valvular disease, and regurgitation through the aortic orifice is not unfrequently observed; but regurgitation through the pulmonary, or through the tricuspid, orifice is rare. The treatment of valvular disease is of a palliative, not of a curative nature; and the attention of the practitioner must be directed to the regulation of the heart's action, by the moderation of undue force, or by the stimulation of the organ when it is weakened, to the removal of the tendency to local congestion, and to the mitigation of the various urgent symptoms as they present themselves. Digitalis is a remedy which is particularly recommended by Dr. Fuller in the treatment of cases in which the action of the heart is feeble and irregular; and he says, in speaking of this form of cardiac disorder, that digitalis "stimulates the heart and regulates its action, augments the tone and contractility of the vessels, increases the flow of urine, and exerts a restorative and calming influence on the system which is not to be attained by any other means." This doctrine is opposed to the commonly accepted ideas respecting the effects of digitalis, which is generally given in cases of hypertrophy (when Dr. Fuller considers that it is apt to do mischief) with a view to the

diminution of the heart's action; but the author supports his doctrine by such excellent arguments, that it is certainly desirable that we should reconsider the therapeutic effects of digitalis.

Dr. Fuller describes two varieties of hypertrophy of the heart, viz., the simple form in which the cavities themselves remain of the same size, and the eccentric hypertrophy, in which the cavities become larger, and their walls are, at the same time, increased in thickness; but he very properly denies the existence of what was formerly described under the name of "concentric hypertrophy," in which the walls of the heart were supposed to be thicker than natural, while the cavities were smaller. This appearance is in reality due to post-mortem forcible contraction of a healthy or simply hypertrophied heart, and is most frequently present in persons who have been suddenly killed. Cruveilhier has stated that it is invariably to be found in the bodies of criminals who have been guillotined. Hypertrophy may be either general or local; in the latter variety, the left ventricle is most commonly affected, and next in frequency to this, the right ventricle. Local hypertrophy is generally dependent upon some obstruction to the free current of blood, so that increased force, engendering a necessity for increased development of the organ, is requisite in order to overcome the resistance to the circulation. When the causes of increased action of the heart are of a general nature, such as excessive exercise or inordinate indulgence in alcoholic drinks, the hypertrophy is also general, and every part of the heart is affected. The author thinks that the complete removal of hypertrophy is almost impossible; but he believes that by careful attention to the health, its effects may be modified, and that the patient may then live for many years in the enjoyment of tolerably good health.

We have already referred to the author's views respecting digitalis, which he strongly recommends in the treatment of the several forms of dilatation of the heart, which are fully described in chapter V. (p. 135 et seq.)

Of late years much importance has been attached to the "arcus senilis" as a symptom of fatty degeneration of various internal organs, and especially of the heart. This morbid phenomenon is certainly of considerable diagnostic value in many cases of constitutional fatty degeneration, but it is very fallacious so far as this particular affection of the heart is concerned. Dr. Fuller states, and our own observations fully coincide with his, that he has often found, in the dead-house at St. George's Hospital, a well-marked arcus senilis, when the heart has been quite healthy, and that he

has as frequently noted complete softening and fatty degeneration of the heart in persons in whom no trace of arcus senilis could be found.

In addition to the diseases upon which we have briefly commented, angina pectoris, functional derangements of the heart, dilatation, aneurism, and other affections of the aorta and pulmonary artery, are all described in a manner worthy of a writer who has made the department of medicine embraced in the title of the work his special study.

The book is one which cannot fail to be of great service in the elucidation of many obscure cases of cardiac disease; and we strongly recommend its perusal to those of our readers who have not yet made themselves familiar with its contents. They may, perhaps, at first think, as we did ourselves when we read this work some time since, that there is a tendency to too much depreciation of the opinions of other labourers in the same field; but calm reflection will show that it is only right if an author has good grounds for entertaining peculiar views, that he should lay them before the profession, in order that the soundness of his doctrines may be tested by multiplied observations and experience.

On Diseases of the Throat and Windpipe, as Reflected by the Laryngoscope: A complete Manual upon their Diagnosis and Treatment. Embellished with 116 Engravings. By GEORGE DUNCAN GIBB, M.D., M.A., Assistant-Physician to, and Lecturer on Forensic Medicine at, the Westminster Hospital. Second Edition, Pp. 481. London: Churchill, 1864.

ALTHOUGH this is brought out as a new edition, it may be considered as a perfectly new work, for it contains, what the former edition could not, all the information that is at present attainable, in consequence of the introduction of the laryngoscope. Many doubtful and uncertain points, which previously existed concerning the affections of the air-passages, have been satisfactorily cleared up since the issue of the first edition of Dr. Gibb's treatise; besides which, that author is enabled to describe several new diseases for the first time. By way of practically illustrating the subject he has introduced the details of a considerable number of interesting cases, and the wood-cuts, executed almost entirely from

drawings made by himself, which have been freely introduced, aid materially in giving the reader an insight into their nature.

In the first chapter the author describes the diseases of the upper air-passages, beginning with follicular disease of the mucous membrane of the throat, commonly termed *Dysphonia Clericorum*, although it is by no means confined to the clerical profession, and is met with in many persons who have to use the voice continuously and frequently. In fact, the term "*Clergyman's Sore Throat*," vague and indefinite as it is, ought to be omitted from medical literature. The reader will find this a very interesting and instructive section; and the author does full justice to the researches of Dr. Horace Green, of New York, on this disease. We need not be surprised at its comparative frequency when we find its chief causes so often in operation, namely, atmospheric vicissitudes with moisture, the use of the voice in continuous exertion when the patient is already suffering from catarrh, and similar causes. This distressing complaint is fortunately amenable to proper treatment, as is shown by the issue of the cases given by the author. Topical medication is generally most essential in its treatment, and various methods are enumerated as being serviceable in the promotion of a cure, including inhalation of medicated vapours, and the hydrostatic treatment by means of the vapour or spray of drugs reduced to a very fine powder, and forced in upon the affected parts by the laryngeal fluid pulveriser. This latter method is especially recommended by the author, in cases of combined throat and lung disease; but in the majority of cases, he seems to prefer the employment of an angular brush, with which direct applications may be made with perfect safety, to almost all the parts rendered visible by the laryngoscope. A solution of caustic, in the proportion of two to four scruples of nitrate of silver to an ounce of distilled water, is a favourite local remedy in the author's practice. As regards the internal, which is equally important with the topical, treatment of follicular and other forms of throat disease, he often prescribes a weak solution of ioduretted iodide of potassium, combined with a carminative and tonic.

The first chapter also contains some important information on diseases of the epiglottis, and the abnormal conditions of that cartilage, with co-existing tuberculous affections of the lungs. The hitherto received opinion has been that the epiglottis is almost always in the erect or vertical position; but Dr. Gibb shows, from extensive researches which he has made upon this question, that in eleven per cent. of the population this cartilage is oblique, semi-, or nearly quite,

pendant, or nearly horizontal. This is a point which has a very wide bearing upon the susceptibility of certain individuals (in whom this abnormality exists) to diseases of the throat; and the author places some stress upon the desirability of examining the air-passages in young children, so that being fore-armed with a knowledge of any peculiarity of development, we may be in a better position to devise prophylactic or curative measures. His remarks upon the great importance of diagnosing the condition of the epiglottis, and also of diagnosing and remedying the laryngeal affections which exist concomitantly with phthisis pulmonalis, are of much practical value.

The second chapter treats of diseases of the vocal cords, comprising the conditions which give rise to aphonia, hoarseness, stammering, and other pathological modifications of the voice. They are all ably described; but what will those who think a knowledge of the dead languages quite unnecessary in the study of medicine (which they would seem to wish to remove from the *learned* professions) say to such terms as Acanthophonia, Contendophonia, and Diplophonia, which are introduced by the author? We may mention here that, for the assistance of those whose Greek has grown rusty, a glossary of terms is appended to Dr. Gibb's work.

One of the best chapters in the book is the fourth, in which are described the various specific diseases of the throat,—diphtheria (an excellent summary being given of all that is known concerning this fatal disorder), syphilis, gout, cancer, and elephantiasis. A singular case of the latter affection, situated in the throat and fauces, is detailed at page 272. The author speaks highly of the value of sanguinaria (*S. Canadensis*, or Blood-Root) in the treatment of the croupal form of diphtheria, and he says that it exercises an energetic stimulating effect upon the entire mucous membrane of the fauces and respiratory tract, while at the same time it prevents the effusion of more diphtheritic exudation. The strong tincture may be given in doses of forty to sixty drops every two hours, for adults, and in proportionately smaller doses for children; in large doses it acts as a stimulant emetic.

A curious disease, to which Dr. Gibb has given the name of "Saccharine Throat," is now described for the first time. It depends upon certain systemic changes, of which the principal is the conversion of the saccharine element (now called hepatine or amyloid matter) into fatty matter, which is deposited in various parts of the body. As this general atheromatous degeneration proceeds, a dry throat and husky voice are often present, in connection with the changes going

on in the air-passages, as well as in other parts of the body. Sometimes there is excessive secretion from the mucous membrane of the fauces, which, upon examination, is found to be covered with a thin layer of gelatinous and fatty matter. Upon the removal of this secretion, the fauces and mouth are seen to be very greasy, and the mucous follicles are more than usually prominent, and appear to pour out an oily secretion. The tongue is rather furred, and the patient complains of a sweet taste in his mouth, especially when eating his food, which tastes as if sugar had been mixed with it. He is obliged to hem frequently, in order to clear the throat, and sometimes the noise made is of a barking or cracked character. This depends upon calcareous degeneration of the cartilages, with a mixture of adipose or atheromatous matter, combined with structural change in the yellow elastic tissue of the vocal cords, corresponding to the atheromatous degeneration which takes place in the coats of the blood-vessels. At the same time the face presents what the author terms the "Atheromatous Expression;" it has a greasy look, the nose and lips appear slightly swollen, the eyes are bright and watery, and an arcus senilis may be found to exist. The skin of the face is smooth, and often covered by numerous small red vessels, ramifying in stellated patches. There is no necessary connection between "saccharine throat" and diabetes, although traces of sugar are sometimes present in the urine. The diagnosis of this affection, of which the chief distinctive characteristics are the atheromatous expression, enlargement of the mucous follicles of the throat, the peculiar nature of the secretion, and the sweet taste, is more easy than the treatment, owing to the fact that the local disease is only a manifestation of a grave general malady, dependent on the transformation of sugar into fat. Astringent and alterative local treatment should be combined with constitutional measures. Sedatives, tonics, and occasional aperients, for the purpose of ensuring the proper action of the bowels, will be found most useful. The patient's diet should be carefully regulated; meat, of which mutton is the best form, is to be taken only once a day; malt beverages are to be abstained from, and weak whisky or gin and water, and light dry wines, to be taken in their place; the quantity of farinaceous food should be limited, and thin dry toast will be found preferable to plain bread.

The etiology of "Saccharine throat" is rather obscure; amongst the most probable causes, Dr. Gibb, following Dr. Prout's view, that the use of tobacco in smoking is apt to produce derangement of the assimilative functions, places the excessive use of tobacco, whether in smoking or chewing

(p. 309). All who have observed the irritable, and congested condition of the faucial mucous membrane, and the increased secretion of the mucous follicles, produced by the habit of smoking to an inordinate extent, will agree with the author (who quotes the corroborative testimony of Dr. Horace Green), in the correctness of this view; but, as the disease is also met with in the fair sex, with whom the habit of smoking is certainly not prevalent, we must consider that saccharine mal-assimilation, dependent upon various causes, may give rise to it, and that the "weed," on which so much abuse has of late years been heaped, is not responsible for every case of this disorder; in fact, the author by no means condemns the moderate use of tobacco.

Some singular cases of deformity of the larynx are described in the section commencing at p. 318. Amongst these, are absence and malformation of the epiglottis; absence of the whole, or of a considerable portion, of the thyroid cartilage; and absence of the cricoid and arytenoid cartilages, a circumstance which is very interesting, from its establishing a peculiar resemblance between the larynx and the trachea. The study of malformations of the larynx is yet in its infancy; and a wide field for valuable investigation respecting them is opened up by the laryngoscope, as the number of deaf and dumb persons, in whom we might reasonably expect to find some irregularity in the formation of the vocal apparatus, is estimated at 250,000 in Europe alone.

A treatise of so comprehensive a character as Dr. Gibb's work would lose some of its completeness if the diseases of the mouth, nose, and adjacent parts were left unnoticed, and he consequently gives, in the eighth chapter, a summary of all the affections to which they are specially subject. This chapter concludes with an account of the salutary influence possessed by the beard and other hirsute appendages in warding off affections of the throat and facial neuralgia, the author being evidently of the same opinion regarding the utility of the beard, as the learned physician who recently delivered a very able lecture on Pogonotrophy (or cultivation of the beard) before the Fellows of the Dublin College of Physicians.

In chapter XI we find an excellent description of the diseases and injuries of the hyoid bone, an important, but until lately, almost altogether neglected subject, with which the author has already taken much pains to render the profession more familiar. In other chapters, the various injuries to which the throat is exposed, including wounds, burns, and scalds; the diseases of the trachea, comprising remarks on

tracheotomy, which the author rightly advocates in suitable cases, and gives the preference to over laryngotomy; and the symptoms and treatment of foreign substances in the air-passages, are described in a systematic and exhaustive manner. The concluding chapter gives us a complete history and practical account of the laryngoscope and of the rhinoscope, a similar instrument, devised for the purpose of facilitating a visual examination of the nasal passages.

We trust that we have said enough to indicate the interesting nature of this volume, which we can honestly recommend to our readers. Its author is so well known as one of the most ardent and successful cultivators of the important branch of medical science on which it treats, that the reader may justly calculate on finding much original matter, drawn from Dr. Gibb's own experience and practice. In addition, we have in this work a complete digest of the information which can be procured from the writings of others. Few subjects are of more importance in practice than some of those included within the class of diseases described, and we may hope that, as regards many of them, the accuracy of diagnosis which may now be attained by the use of the laryngoscope, may lead to still more valuable results as regards treatment. In fact, we may be almost said to be only now beginning to realise the benefits which this invaluable instrument is destined to confer on suffering humanity.

The Seven Sources of Health. By WILLIAM STRANGE, M.D., M.R.C.P., Physician to the General Hospital, Worcester, &c. Fcap. 8vo., pp. 312. London: Renshaw.

It is obvious that this book has been written for popular reading, and as such hardly requires notice at our hands, did we not feel it to be the duty of medical journalists in the interest of the public to examine and judge of the character of mental food which is supplied to them on medical topics. We have performed this duty in the case now under notice, and can not only sanction but would cordially recommend a careful study of the contents of this book. It is not only well written, but the facts are often amusingly and always strikingly told, while the reasoning is clear, sound, and forcible.

The subject of hygiene has of late years become such a popular one that the mass of the people are, we should hope, by this time becoming tolerably conversant with its leading features. Those who are not so versed may with great advantage to themselves read this book. It contains seven chapters; the first is a physiological introduction; the others

treat of air, light, heat, and climate, food (including drink), exercise, bathing, sleep, and lastly, the health of the mind.

As we have just said, we do not need to analyze this book for our medical readers; and we only notice it for the purpose of telling them and others that in it they will find a work which they may with confidence recommend to all those who take any interest in the subject of which it treats.

On Paralysis, Neuralgia, and other Affections of the Nervous System; and their Successful Treatment by Galvanization and Faradization. By JULIUS ALTHAUS, M.D., M.R.C.P., Physician to the Royal Infirmary for Diseases of the Chest. Third Edition. Pp. 236, small 8vo. London: Trübner and Co. 1864.

The Treatment of Hoarseness and Loss of Voice by the Direct Application of Galvanism to the Vocal Cords. By MORELL MACKENZIE, M.D., M.R.C.P. Pp. 24, small 8vo. London: T. Richards. 1863.

ALTHOUGH Marshall Hall, Todd, and Golding Bird, all of whom are now dead, with a few others, have placed on record their experience of electricity and galvanism as remedial agents, the valuable curative powers of these remedies in many affections of the nervous system have not met with a fair degree of recognition in this country, and the English contributions to the literature of this branch of therapeutics have been, until a recent period, scanty. In this latter respect we are much behind foreign practitioners; on the continent, Becquerel, Beckeinstein, Duchenne, Gavarret, Remak, and numerous other authors, have written upon this subject; while Dr. Garratt's large octavo volume on "Electro-Physiology and Electro-Therapeutics," published at Boston, Massachusetts, in 1860, shows that the Americans are not slow in availing themselves of the medical uses of electricity.

Our want of reliable information in a comprehensive form, giving the modern views concerning the employment of electricity and galvanism, as remedial agents, has been ably supplied by Dr. Althaus, who, both in the little handy book, now before us, and in his larger treatise "On Medical Electricity," proves himself to be a thorough master of the subject on which he has written.

The history of these agents, as employed medicinally, is very interesting. So long ago as the time of Scribonius Largus, a Roman physician, who lived in the reign of the

Emperor Tiberius, the curative powers of the torpedo, or electric ray, a fish which, as is well known, possesses the power of communicating, when touched, a shock analogous to that of the Leyden jar, were fully understood; and Pliny and Dioscorides also refer to the fact that this curious remedy was frequently resorted to. It is a singular fact in connection with this point that, from time immemorial, it has been a custom amongst the negro women, in some parts of Africa, to place weak and sickly children in pools of water where electric fishes are contained.

The ordinary electrical machine, in which electricity was produced by the friction of a glass cylinder between cushions, and, at a still later period, the Leyden jar, formed for a long period the only means by which the medical benefits of the electrical phenomena could be obtained. The discoveries of galvanism in 1786, and the voltaic pile in 1800, brought with them advantages which could not previously be procured, and led to so unbounded a degree of enthusiasm and expectation, that after some few years a reaction of feeling occurred, and the confidence in the curative powers of galvanism was nearly lost,—a result not to be surprised at when we take into consideration the circumstance, that very little was known of the physiological action of the galvanic current, and that it was indiscriminately employed. In 1831, Faraday made the great discovery that electric currents of instantaneous duration are induced in conducting-wires by the passage of an ordinary galvanic current (electro-magnetism) as well as by the approach to, and withdrawal from, conducting-wires, of a permanent magnet of steel (magneto-electricity).

Both of these new agents were found to be of remarkable power, possessing physical, chemical, and physiological properties, altogether different from those of the continuous galvanic current. Duchenne, at a subsequent date, drew the attention of the medical profession to the therapeutical benefits of induction currents, and in honour of the discoverer of this form of electricity, gave to its methodical application to the treatment of disease the name of "Faradization."

It must not, however, be supposed that, although Faradization is a more powerful and more readily regulated method of applying electricity, it is uniformly to be employed; the form of electricity to be made use of must depend upon the object in view. Thus, for instance, if we desire to avail ourselves of the chemical effects of electricity, we must, for reasons given by Dr. Althaus, rely upon the continuous galvanic current alone. By bringing the blood under the influence of a continuous galvanic current, the coagulation of that fluid may be produced, and this fact has

been successfully turned to account in the treatment of aneurism and varix.

According to the author, cases of hydrocele, in which both the injection of iodine and the use of setons had failed, have been cured by Faradization and galvanization, the former being preferable, from its being less troublesome; opacities of the cornea can be entirely removed by Faradization; and ulcers, in which it is difficult to promote healthy granulations in any other way, are speedily cured by either of the two agents just named. The use of electricity in the treatment of cataract and strictures of the urethra has been attended by unsatisfactory results; and our knowledge of the subject requires to be greatly enlarged before any attempts at curing urinary calculi are likely to prove advantageous; for, although calculi may be dissolved or disintegrated by the action of electricity, it has hitherto been found impossible to construct an instrument by which the current can be safely conveyed to the calculus; besides which, other difficulties would have to be overcome, such as the high temperature which the liquid in the bladder assumes, and the large amount of gases generated by the decomposition of water.

The author entertains a very low estimate of the value of the electro-chemical bath, which has been highly extolled by some writers; and he also proves, by experiments which have been made by different observers, that electricity does not facilitate the absorption of medicinal substances into the body, as has been stated by others.

Dr. Althaus gives cases which show that both Faradization and galvanization are very useful remedies in acute and chronic muscular rheumatism. It is in the different forms of paralysis, however, that the practical value of electricity is most apparent, and his remarks upon the treatment of nervous disorders constitute, as is indicated by the title, the principal portion of his book. His observations upon this subject, corroborated as they are by the details of numerous cases, are very instructive, and deserving of a careful study.

Electricity is not only valuable as a means of cure, but it also furnishes important aid in diagnosis. For instance, when the excitability of a paralyzed muscle is exalted by electric action, we may conclude that the paralysis is due to brain disease, and that the lesion is of an irritative character, because there is no form of paralysis except that produced by this cause, in which the exalted excitability of the affected muscle is present.

Faradization and galvanization are very excellent auxili-

aries in the treatment of various spasmodic diseases, such as chorea, spasmodic wry-neck, and muscular cramps and contractions connected with hysteria. The author states that children generally bear Faradization remarkably well, as it is not necessary to employ a strong current.

The utility of Faradization is also well marked in many cases of anæsthesia, when this affection is of idiopathic, rheumatic, or hysterical origin; but if the anæsthesia depends on structural diseases of the nervous centres and of the sentient nerves, no benefit can be derived from the electric current until after the original lesion has subsided.

The value of electricity in the treatment of aphonia is often very evident, and Dr. Althaus narrates some striking proofs of this. Dr. Mackenzie's pamphlet, which specially treats of this disease, is a reprint of a paper which was read at the last annual meeting of the British Medical Association, and contains the details of fourteen cases of hoarseness and loss of voice, which were successfully treated by the direct application of galvanism to the vocal cords. Galvanism has long been employed for the relief of affections of the throat arising from nervous causes, but it was always applied to the throat externally, and there was consequently not unfrequent failure in consequence of the current not reaching the part which was affected. The novelty of Dr. Mackenzie's plan, and the circumstance to which its success is, doubtless, in great measure due, is that, availing himself of the laryngoscope, so as to see the interior of the larynx, he applies the galvanic current directly to the nerves and muscles which are at fault. For this purpose, the larynx having been properly exposed to view, he introduces an ingeniously devised little instrument, the "laryngeal galvanizer," the point of which can be brought into contact with the vocal cords. A little dexterity is requisite in using this instrument (of which a figure is given at page 22), but the operation is not attended with any particular difficulty, or pain to the patient.

The results of the plan of treatment adopted by Dr. Mackenzie were very remarkable in several of the cases of which an account is given. In one patient, a child 10 years old, aphonia of five months' standing was cured by a single application of galvanism to the vocal cords; in another, where the patient, a woman 23 years of age, had suffered from loss of voice for eight months, a cure was also accomplished by one application only; and most of the other cases were brought to a favourable termination in so short a space of time as must have satisfied the most impatient of patients. The cases are described clearly and without reservation on the part of the author, to whom considerable credit is due for

the practical application of galvanism to the treatment of certain affections of the throat, and for the plain, unassuming manner in which he has brought that method under the notice of the profession.

A Manual of Diet and Regimen for Physician and Patient. By HORACE DOBELL, M.D., M.R.C.P., Physician to the Royal Infirmary for Diseases of the Chest. Octavo, pp. 36. London: Churchill. 1864.

THE subject of diet, simple as it may at first sight appear, is so closely complicated with conflicting physiological and chemical theories that we feel a sense of gratitude to the author of this little manual for the able manner in which he has grappled with the difficulties surrounding this question, in giving us an epitome of the opinions, apart from the speculations, of those writers whose researches into the influence of diet upon health entitle them to be considered as authorities.

He states, in his preface, a belief that a want for such a manual has hitherto existed, and upon this point we cordially agree with him; and it is also tolerably certain that the requirement would long before now have been supplied had not the difficulties to which reference has been made deterred others from publishing. Dr. Dobell has consequently undertaken an onerous, and, in some respects, a thankless task; for, as he remarks, "as the work is the first of its kind, nearly every medical man may find in it some point in which, he thinks, it might be improved." The correctness of this observation has already been made apparent by the partial criticisms of some of his reviewers. With one, the small size of the manual, and limited number of the rules laid down, seem to be a matter of astonishment, as if the subject could be better dealt with in an unwieldy, large volume. This writer has, perhaps, never heard of the, often very true, proverb, *Μέγα βιβλίον μέγα κακόν* (a great book is a great evil), and is probably of the same mind as the Mæcenæ referred to in No. 529 of the "Spectator," who was accustomed, when entertaining his literary guests at dinner, for the excellence of which he was more famous than for the extent of his wisdom, to place them according to the size and thickness of the books which they had published; at the head of the table sat those who had published in folio; next the authors in quarto; then those in octavo; and so on. In our opinion the handy character of Dr. Dobell's work is one of its greatest recommendations. Another critic objects

to the book as unpractical, because neither an average man nor an average dinner exists; but he seems to lose sight of the fact that the Manual is designed for persons who are ill, rather than for those who are in sound health, and who can consequently take liberties in respect of eating and drinking, not permissible to other less fortunate and less healthy beings; besides, it is not less difficult to fix a mean in physic than in food, for a dose of some drugs, which would scarcely affect one individual, may, in certain idiosyncrasies, be almost sufficient to send another individual into the next world; but we do not find, on this account, that writers on therapeutics hesitate to name the average quantity of a remedy to be taken at a dose; why, then, need there be any hesitation in attempting to define the amount or quality of food, and the kinds of wine and other beverages which are best suited for invalids suffering from particular ailments?

The rules for promoting and maintaining vigorous health, in adults not suffering from any special diseases, include plain advice, arranged under the heads of ventilation and heating of apartments, clothing, sleep, exercise, posture, bathing, regulation of the bowels, rest and change, and meals. These suggestions, which are written for the non-medical reader, are sensible, and nearly all of them to the purpose. In speaking of bathing, however, the author recommends that, during ordinary health, the body and limbs should be well rubbed once in twenty-four hours, first with a rough towel, wet with cold water, and then with a dry one till in a glow; the bather standing on a dry rug while using this "cold friction bath," which "should not last more than one or two minutes, including both the wet and dry rub." We do not hold with Dr. Dobell on this point, for we like to *get into* our morning bath, whether in summer or in winter, and to spend at least ten minutes or a quarter of an hour in bathing, dry rubbing, and gymnastic movements afterwards, to freely exercise the pectorals and other muscles of the upper parts of the body; and we always recommend our friends who consult us "*de tuendâ sanitate*" to adopt the same plan. Nor do we agree with the author upon the subject of "alcohol fasts" (p. 18). Persons who habitually take alcohol daily are advised to abstain from it entirely during a few days twice or thrice a year, but this surely is a mistake; if the effects of a moderate quantity of alcohol, by which term, used in its widest sense, are understood wine and malt liquors, as well as spirits, exercise so great an influence upon the system as would be supposed from this cautionary direction, it would evidently be as injudicious to totally withdraw all stimulating drinks from a person's diet

for some days, as it would be to considerably curtail the quantity of food during the same period. On this question of regimen we would rather think with Shakspeare, that

“Temperance with golden square,
Betwixt them both can measure out a mean.”

Some idea of the pains-taking manner in which the author has drawn up the diet-tables and alcohol table, may be formed when it is stated that a careful comparison has been made of the analyses of the same substances by different chemists, and that the average of these has been taken, so as to give a fair approximation to the actual composition of each article of food or drink. The names of the eminent chemists whose analyses have been used are given; and of these analyses, thirty-eight of the cereal grains, fourteen of the leguminous seeds, thirty-six of the esculent roots, and sixty of food obtained from animals, have been examined and compared. A corresponding degree of care and trouble has been taken in the preparation of the alcohol table. Dr. Dobell mentions his indebtedness to Mr. Farrants, the President of the Microscopical Society, for important assistance in making this extensive series of examinations and calculations.

The Prescriber's Companion. By ALFRED MEADOWS, M.D., M.R.C.P., Physician Accoucheur to the General Lying-In Hospital, &c. Pp. 152, 32mo. London: Renshaw. 1864.

THE issue of a National Pharmacopœia, singularly distinguished by errors and omissions, has naturally given rise to the publication of numerous hand-books, devised for the purpose of explaining to the profession generally such points as the compilers of the Pharmacopœia, whether purposely or accidentally we know not, have neglected. Some of these manuals are almost as vague and indefinite as the Pharmacopœia itself, but others, amongst which may be included the “Prescriber's Companion,” are of a very useful and valuable character.

Following, with some slight modifications, the method of classification used by the late Dr. Pereira, the author arranges the contents of his book into six parts. Part 1 contains remedies intended for external application only; Part 2 includes those medicines, such as chalybeates, &c., which act upon the blood; Part 3 comprises remedies which act upon the nervous system; Part 4 includes those which affect the secretory system; Part 5 is devoted to the medi-

cines which act upon the generative system; and the 6th Part contains a list of substances useful as disinfectants, and a table of poisons, and their antidotes, taken from Dr. Pereira's work on "Materia Medica."

Under these several heads are included all the official preparations, specially denoted by the letters B. P. (British Pharmacopœia), and also (a feature which renders the manual particularly valuable) other preparations which, although not contained in the official Pharmacopœia, are yet entitled to a place in any work on therapeutics, on account of the properties which the experience of various observers has proved them to possess. These latter are arranged in such a manner as to distinguish them from the official preparations.

The greatest blunder, perhaps, which was made in the compilation of the British Pharmacopœia, was the omission of a posological table, so that the majority of its readers were, of course, left in a complete state of uncertainty with regard to the quantity in which the numerous new remedies introduced for the first time, ought to be given. Dr. Meadows appends to every preparation the dose which should be used in the case of an adult and in that of a child one year old, the latter forming a convenient guide by which the dose for older children can be calculated.

In conclusion, we may state our opinion, after carefully looking through "The Prescriber's Companion," that it is a work which conveys, in moderate compass, a very large amount of information upon Materia Medica and Therapeutics.

Spectropia, or Surprising Illusions: showing Ghosts Everywhere and of Every Colour. By J. H. BROWN. Second Edition. London: Griffith and Farran. 1864.

TAKING advantage of two well-known facts, viz., the persistency of impressions, and the production of complementary colours upon the retina, Mr. Brown has successfully contrived to show, in a very striking manner, the source of many optical illusions. The different senses are all liable to deception, at times, and that of sight is, perhaps, more frequently at fault than any of the others; this is especially the case with persons who are in a bad state of health, as the sensibility of the retina is then usually morbidly increased, while the imagination is apt to become confused and disturbed.

The way in which many optical illusions arise, such as the imaginary spectres of persons or things, is explained by Mr. Brown, in a popularly scientific description of the organ

of vision and of the leading properties of light. If we look steadily on an object for a quarter of a minute or longer, and afterwards turn the head away, so as to enable us to look at the clear sky, or on a white wall at some distance from us, a figure of the object which we have been looking at is still seen, owing to the retention of the impression previously produced upon the retina by our steadfastly regarding the real object, and after a few seconds this figure gradually becomes more and more indistinct in proportion as the impression upon the retina dies away. This effect is particularly produced by looking at coloured figures, the colour of the spectral object seen being different from that of the original figure, in accordance with the laws which govern the production of complementary colours upon the retina. Thus, a green figure will give a red spectre, a blue figure will give an orange spectre, and a purple will give a yellow spectre.

The work is illustrated by sixteen figures, upon each of which a small mark or dot is placed; after looking steadily at this dot during the time occupied in counting twenty, the same figure will be seen, magnified in size, upon turning the eyes to the sky, a white wall, or the ceiling. Some of these spectral figures we have been able to see very plainly, others with indistinctness only; the reason of this is, that the eyes of many persons are not equally sensitive to all colours.

There are two great sources of optical illusions; one, which has been described, arising from the retentiveness of the retina, and the other from mental deception when a natural object is imagined to be something other than it is. By explaining the former, Mr. Brown has done a service; and both young and old will derive amusement and instruction from his book.

PAMPHLETS.

A Vindication of Aural Surgery. (London: Churchill.)—The object of a Member of the New Sydenham Society, by whom this pamphlet is professed to be written, is a wholesale attack upon Dr. Kramer, the German author of a work, entitled, “The Aural Surgery of the Present Day,” which has recently been translated and published under the auspices of the New Sydenham Society. That Kramer’s views upon some points connected with aural surgery are not in keeping with the advanced knowledge of the present day will be admitted by all who take the trouble to compare this pamphlet with Dr. Kramer’s work; still, it is more than doubtful whether it is worth while for any one to work himself into

such a state of indignation as the anonymous writer of this pamphlet has done. Any member of the New Sydenham Society, which has brought many meritorious foreign works into notice during the few years of its existence, can learn beforehand, without much trouble to himself, what books are intended to be published, and, in fact, the Council of that Society invites the suggestions and advice of any members upon proposed publications; the writer of this pamphlet must, therefore, have had full opportunities, had he chosen to avail himself of them, of stating his views to the Council, and thus inducing them to reconsider their determination of publishing Dr. Kramer's book. Instead of this, he looks quietly on, without any attempt at interference, until after the book is issued to the members, when he writes the present pamphlet for the sole purpose of criticising Kramer in no measured terms, and of taking the Council of the New Sydenham Society to task for ignorance and carelessness. We have said sole purpose, and we trust that it may be so; but the extensive gratuitous circulation of the pamphlet, the frequent mention of the name of only one English aural surgeon, and the withholding of the name of the writer, tend to make the object of the pamphlet open to suspicions for which the writer has only himself to blame.

A Contribution to the Pathology of the Crura Cerebri. By HERMANN WEBER, M.D.—In this paper are given the details of a very interesting case of lesion of the brain at the crura cerebri, which resulted in the death of the patient. The patient, a man of 52 years of age, had been affected with disease of the aortic valves and rigidity of the arteries, and had suffered from disturbed sleep and headache during the last few years of his life; about two months previously to his death he was suddenly attacked by paralysis of the right side of the body, and of the muscles supplied by the third cranial nerve of the left side, and he eventually died of broncho-pneumonia, chiefly on the right side of the chest, after slight but perceptible improvement in the symptoms of the paralysis. Upon making a post-mortem examination, it was discovered that hæmorrhage had taken place into the internal and lower portion of the left crus cerebri, and that there was partial degeneration of the third left cranial nerve (motor oculi). The deductions made by Dr. Weber from this and some other cases of lesion of the crura cerebri are, that any considerable lesion of this part of the brain causes:—
1. Almost complete paralysis of motion of the limbs of the opposite side, and great impairment to the sensation; 2. Less complete, and merely transitory paralysis of the opposite side

of the face, the muscles of the eye being left unaffected; 3. Similar, but perhaps more lasting impairment of the pneumogastric and sympathetic nerves of the opposite side; 4. Great retardation in the functions of the intestinal canal. Dr. Weber further infers from the history of the cases described, that the intellectual faculties and the spinal nerves appear to be quite independent of the crura cerebri; and also that the third nerve on the side of the lesion (not on the opposite side) appears to become paralysed only in those morbid conditions of the crus which affect the most internal and inferior layers of the nerve-substance, close to the place of issue of the third nerve. The paper, which is a reprint from the "Medico-Chirurgical Transactions," is illustrated by an engraving of the base of the brain, showing the seat of the hæmorrhage in Dr. Weber's case.

1. *General Report on the Dress of the City Police.*—2. *Report on the probable Duration of Life of the Men in the City Police Force.* By G. BORLASE CHILDS, F.R.C.S.—In these two reports, drawn up by Mr. Childs, Surgeon to the City Police Force, at the desire of the Police Committee, we find much information of undoubted value to all who are interested in the sanitary management of large bodies of men, whether civilians or soldiers. Speaking of the requirements of the Police Force, in reference to clothing, Mr. Childs observes, amongst other objections to the hat commonly worn by the men, that it affords no protection to the head in a struggle, as it immediately falls or is knocked off; that it is heavy, weighing 14 oz. even when dry; that it offers no protection to the eyes, face, ears, or neck; and that it does not sufficiently guard the head from a heavy blow. In its place, he proposes a helmet-shaped hat, which fulfils all the indications required in a police head-dress, and which is so vastly superior to the common hat for policemen, that it is a matter of surprise that it was not adopted within a short time after Mr. Childs made his recommendation. The scanty coatee Mr. Childs rightly objects to, and suggests, in its stead, a full tunic, sufficiently warm to protect the wearer from the effects of our cold, damp, variable climate; the covering of the body is very important, when we recollect that in London there are over 160 rainy days annually, and that the Police Force is constantly exposed in all kinds of weather. As an addition to the covering for the legs, Mr. Childs suggests the addition of waterproof leggings, to protect the more exposed parts of the legs from wet and cold. Flannel under-clothing he specially insists upon; and he also points out the necessity for suitable easy-fitting boots, seeing that the daily

walk of the policeman is about sixteen miles, besides which, it is tedious and wearisome. Many of the suggestions made in this report have since been carried out, and to them is probably due, in no slight degree, the superior and more healthy appearance of the men in the City Police Force as compared with those in the Metropolitan Police. In the second report, some interesting statistics are given relative to the medical history, so to speak, of the Police Force. Mr. Childs points out that the tests for the recruits in the force are higher than those in the army and that this circumstance has an important bearing upon the general health of the force. The returns for five years show that, during that period, 1,345 candidates sought admission into the force, and that, of this number, 534 were rejected by the Commissioner, and 181 by the Surgeon, showing the care taken to recruit the force from deserving and intelligent as well as thoroughly healthy men. The mortality of the army stationed at home is much greater than that of the Police Force, whose duty is more severe; during the same period, it reached 11·1 in the Household Cavalry, 13·5 in the Dragoon Guards and Dragoons, 17·8 in the Infantry of the Line, 20·4 in the Foot Guards, whilst in the Police it only amounted to 8·9 per 1,000. These statistics also show, as we think, that an active, although laborious life like that of the policeman is more conducive to health than the idle, inactive life of the soldier, and they furnish a strong argument in favour of increased inducements to exercise, such as gymnastics, &c., for the private soldiers in the army. The tables of cases of diseases amongst the force demonstrate, as might naturally be expected, that the affections induced by exposure to atmospheric changes, such as catarrh and rheumatism, are the most prevalent; syphilis, one of the commonest diseases in military hospitals, is almost altogether absent from the tables as a cause of illness, and as no man can absent himself from duty on the plea of ill-health without reporting himself to the surgeon, the absence of this disease cannot be explained away upon the supposition, that many labouring under this disease would not apply to the surgeon of the force.

The Advantages derivable to the Medical Profession and the Public from the Establishment of Village Hospitals. By ALBERT NAPPER, M.R.C.S. (London: Lewis.)—In addition to a reprint of the excellent practical papers which were contributed by Mr. Napper to Numbers 1 and 2 of the “Medical Mirror,” this pamphlet contains a copy of the Fourth Annual Report of the Cranley Village Hospital, a medical report of the cases

treated in the Hospital during the year ending September 30th, 1863, an abstract of all the cases admitted into the Hospital, during the four years of its existence, the Hospital dietary, and other useful tables. A glance at the abstract of the cases admitted during the four years ending in September, 1863, is sufficient to show the great value of such institutions in country districts; and the results obtained furnish a powerful argument in favour of the establishment of Village Hospitals throughout the length and breadth of the country. We need not repeat here the irrefutable arguments in favour of Village Hospitals, as our readers have already had an opportunity of making themselves familiar with them in our columns; but we may express an earnest hope that the movement began by Mr. Napper, who is the founder of the system of Village Hospitals, will continue to spread until no district of Great Britain is left unprovided with one of these institutions, from which a maximum of public benefit can be obtained at a minimum of expense. We would also suggest the desirability of an early meeting, in London, of the friends of this important movement, for the double purpose of directing the public attention to the benefits to be derived from the establishment of Village Hospitals, and of considering the most suitable manner in which they may be promoted, and afterwards maintained in a state of efficiency. We have heard it suggested before now that the cases which would come under treatment in Village Hospitals would be, generally speaking, of a trifling nature, as persons suffering from severe illness or injury would be taken, preferentially, to the larger institutions situated at the county, or other considerable, towns. This argument is wholly untenable; the folly and absurdity of carrying a man suffering from the recent effects of a bad accident, for many miles over indifferent roads, are almost too apparent to be specially pointed out; and, as regards the nature of the cases which would be brought to a Village Hospital, an inspection of Mr. Napper's table of cases gives a sufficient proof. This list contains several cases of amputations (including two amputations of the thigh), two operations for hare-lip, three for the extraction of cataract, numerous cases of simple and compound comminuted fracture, ligature of the femoral artery, and cases of cancer (with several operations for the removal of the diseased portion), rheumatic fever, pleurisy, pneumonia, asthma, hydrocele, and other affections.

Cases of Procidencia Uteri, and Perineal Lacerations after Labour, cured by Autoplastic Operations. By D. L. ROBERTS,

M.D. (Dublin: Falconer.)—This *brochure* details several cases of these very troublesome, and, until late improvements in operative surgery, almost hopeless diseases, which were successfully treated by the author in St. Mary's Hospital, Manchester. In illustration of the value of autoplasic operations, in this class of affections, we may refer to the first case, described by Dr. Roberts. The patient, aged 49, had suffered from procidentia uteri, which commenced with laceration of the perineum (in consequence of which no relief could be obtained by wearing a pessary), many years previous to her coming under his notice; and so serious had the affection become that she was unable either to walk, sit, or stand, at the period of her admission into the hospital. After some preliminary treatment, by tonics and alteratives, internally, and soothing lotions externally, Dr. Roberts resolved to perform an autoplasic operation, for the purpose of replacing and retaining the uterus in its natural position. This desirable object was accomplished by the restoration of the perineum, and the contraction of the calibre of the vagina, by the removal of slips of mucous membrane from the latter. The operation, the account of which is too long for us to give it here, was performed while the patient was under chloroform, and the patient who afterwards progressed favourably towards recovery, without a single bad symptom, was discharged cured from the hospital in the course of a few weeks.

Portrait of the Earl of Zetland. (London: W. Tegg.)—This excellent and truthful likeness of the noble Earl, who has for twenty years ably filled the position of Grand Master of the order of Freemasons of England, has lately been published by Mr. Tegg, and is certainly one of the best of his well-known series of portraits of eminent men. The Earl is represented in the act of speaking, and dressed in masonic costume; and the large size of the engraving has enabled the artist to introduce various accessories which render it so complete, that we have great pleasure in recommending our brethren of the craft to possess themselves of this handsome and inexpensive portrait of the Grand Master.

NOTES ON THE BRITISH PHARMACOPŒIA.

Showing the Nature and Extent of the Changes which have been Made,
and the Properties and Doses of the New Remedies and Preparations.

[Continued from page 237.]

No. III.

ONE of the first things which must strike the reader on turning to the Second Part of the British Pharmacopœia, in which the preparations and compounds are described, is, that a simply alphabetical order is observed, instead of any attempt being made to arrange the contents under the various heads of alkaline, ethereal, metallic, and other preparations, which system was followed in the London Pharmacopœia. Processes are given for making the chemical preparations; the necessity for their introduction has been severely questioned, but, although it tends to increase considerably the bulk of the volume, while in some cases, as in that of nitrate of silver, the processes recommended will 'seldom be' adopted, for the plain reason that manufacturers can supply the article more economically, the introduction of these processes possesses the advantage that much valuable chemical knowledge, which might otherwise be neglected, is conveyed by them. An objection has also been raised to the individual processes which are given for certain chemical preparations, on the alleged ground that these can be made better in other ways. Dr. Garrod has, however, we think, sufficiently answered this objection in his lectures, where he observes that "the object of the Committee has been to give processes by which each chemical drug can be made, not the one to be necessarily adopted in the manufacture of each. If the result be the same, as far as the quality or purity of the drug is concerned, the mode of making it cannot be of consequence."

Having made these preliminary general remarks, we shall now proceed to consider the preparations more fully in detail.

Aquæ.—The changes which have been effected in this group are neither extensive nor important. The *Mistura Camphoræ* of former Pharmacopœias is now designated *Aqua Camphoræ*. *Aqua Pulegii* is omitted, and two additions, *Aqua Fœniculi* and *Aqua Laurocerasi* are to be found in this group. The latter possesses sedative properties, and may be given in doses of a fluid drachm to a drachm or more, but is too variable in its strength to be of any great value.

Cataplasmata.—The only change in this group consists in the manner of making the *Cataplasma Conii*, in which the powdered leaf of the hemlock is directed to be used, instead of the extract of hemlock, formerly employed.

Cerata.—The Cerates, of which nine were described in the last London Pharmacopœia, are either omitted or transferred to the group of *Unguenta*.

Confectiones.—Four preparations, *Conf. Aurantii*, *Conf. Cassiæ*, *Conf. Opii*, and *Conf. Rutæ* are omitted. *Confectio Amygdalæ* has been transferred to the powders under the name of *Pulvis Amygdalæ Compositus*, and *Confectio Aromatica* has also been removed to the same group, under the name of *Pulvis Aromaticus*. Two new confections are added: the *Confectio Sulphuris*, which may be used as a purgative, in half-ounce to ounce doses for adults, or in smaller quantity for children; and *Confectio Terebinthinæ*, which is said to be a good form of administering this nauseous remedy, in doses of sixty grains to half-an-ounce, or more. In the *Conf. Piperis* an alteration has been effected by the substitution of caraway for elecampane and fennel and the omission of the sugar; the composition of *Conf. Scammonii* is also slightly changed.

Decocta.—No less than thirteen decoctions, viz., those of Chimaphila, Pale and Red Cinchona Barks, Cydonium, Dulcamara, Galls, Granatum, Hordeum (Co.), Scoparium (Co.), Senega, Tormentil, Ulmus, and Uva Ursi, have been omitted, but some of these remedial agents figure amongst the new infusions. Decoctum Scoparii has been introduced in the place of Decoct. Scoparii Comp., and some of the decoctions which are retained have been altered in their composition. The proportion of aloes in the compound decoction of aloes is increased, while the liquorice, myrrh, saffron, and tincture of cardomoms are diminished; the decoction of yellow bark is somewhat weaker; cinnamon is added to the decoction of logwood; and the decoction of poppies is one-fourth stronger than that of the London Pharmacopœia. The name of Mucilago Amyli has been substituted for that of Decoctum Amyli.

Emplastra.—The Plasters of Ammoniacum, Cumin, and Iodide of Potassium are omitted; and Emplastrum Calefaciens, a stimulating warm plaster, has been added. The term Emplastrum Plumbi is replaced by that of Emplastrum Lithargyri, and alterations have been effected in the method of making some of the other plasters.

Enematæ.—Enema Colocynthis is omitted, and Enema Magnesiae Sulphatis is introduced. The composition of the other enemata is altered.

Extracta.—Extensive alterations have been made in this important group. Directions are given to ensure the removal of the albumen contained in the juices, in the preparation of those extracts which are made from the green parts of plants, so that the liability to decomposition is obviated; this is effected by coagulating the chlorophyll, or green colouring matter, by the application of heat of 130° to the juice, then removing it by filtration, and not adding it until the end of the process. The omissions are Ext. Cinchon., Ext. Cinchon. Pallid., Ext. Cinchon. Rubr., Ext. Colocynth., Ext. Lactucæ, Ext. Papaveris, Ext. Pareiræ, and Ext. Uvæ Ursi. Eleven new extracts, of which five are liquid, have found a place in the British Pharmacopœia; Ext. Anthemidis, a bitter tonic, in doses of ten to twenty grains; Ext. Belæ Liquid., astringent, in half-ounce to ounce doses; Ext. Calumbæ, tonic, in five to twenty grain doses; Ext. Cannabis Indicæ, sedative, in doses of two to ten grains; Ext. Colocynth. Co., purgative, three to ten grain doses; Ext. Ergotæ Liquid., emmenagogue and parturefacient, in doses of ten minims to a fluid drachm; Ext. Filicis Liquid., anthelmintic (dose, half-a-drachm to two drachms); Ext. Krameriæ, astringent, in five to twenty grain doses; Ext. Opii Liquid., sedative and narcotic, given in doses of five to thirty minims; Ext. Pareiræ Liquid., diuretic, in ten to thirty minim doses; and Ext. Quassiae, a bitter tonic, in doses of ten to twenty grains. The changes in nomenclature include the alteration of Inf. Cinchon. Spissatum, removed from the Infusions, into Ext. Cinchon. Liquid., of Ext. Aloes into Ext. Aloes Socotrin., and Ext. Elaterii into Elaterium. The mode of preparing several other extracts differs from that formerly adopted, but their doses remain almost unaltered.

Infusa.—The infusions included in the new Pharmacopœia are twenty-seven, being an increase of three as compared with the number described in the last London Pharmacopœia. This shows only in a slight degree the activity of the Pharmacopœia Committee in dealing with this group, as on further examination it will be found that five infusions have been omitted, nine have been added, eleven of those which have been retained have been altered in composition, and that the names of four have been changed. We have entered upon this numerical statement in order to show that a mere cursory inspection of the work under consideration is altogether insufficient to give an adequate idea of the extent of the labours of the Committee, and that it is necessary, for the purpose of arriving at a fair

estimate of the changes which have been effected, to compare the British with former Pharmacopœias.

The omissions are Inf. Armoraciæ Co., Inf. Aurant. Co., Inf. Cinchon. Pallid. Spissat., and Inf. Rosæ Co. The additions are Inf. Aurantii, tonic and stomachic; Inf. Chirataë, a bitter tonic; Inf. Cusso, possessing anthelmintic properties; Inf. Dulcamaræ, sometimes given as an alterative in skin diseases; Inf. Ergotæ, emmenagogue and parturefacient; Inf. Maticæ, astringent and styptic; Inf. Rosæ Acid., astringent, febrifuge, and tonic; Inf. Senegæ, stimulant and antispasmodic; Inf. Uvæ Ursi, astringent, and useful as a local tonic in the treatment of chronic inflammation of the mucous membrane of the bladder. The dose in which each of these infusions may be given is from one to three fluid ounces. Some of these new infusions, viz., those of dulcamara, senega, and uva ursi are substitutes for the old decoctions of the same remedies; the value of one at least, the Inf. Dulcamaræ, is very doubtful, as, even when dulcamara is boiled in water for some time, the proportion of active principle which can be obtained is small, and the quantity which is procured by means of infusion is still less.

As regards the changes which have been made in the directions for preparing many of the infusions, it may be briefly stated that the infusions of calumba and quassia are directed to be made with cold instead of with boiling water; and that those of chiretta and cusparia are to be made with water at 120° of heat. The infusions of camomile, of cascarilla, of cloves, of cusparia, of gentian (a much less agreeable preparation than the Infus. Gentian. Co. of the London Pharmacopœia), of quassia, and of rhubarb, have nearly double the strength of the old preparations of the same names, owing to the circumstance that the quantity of the active substance used is about the same as that ordered in the London Pharmacopœia, while the amount of water is reduced from a pint to ten fluid ounces.

Linimenta.—The omissions in this group of external remedies are Lin. Æruginis and Lin. Ammon. Sesquicarb. The additions are Lin. Aconiti, possessing a sedative action, and very useful in the local treatment of neuralgia; Lin. Belladonnæ, also sedative; Lin. Cantharidis, stimulant, counter-irritant, and vesicant; Lin. Chloroformi, sedative; Lin. Crotonis, stimulant and counter-irritant; Lin. Iodi, stimulant and absorbefacient; and Lin. Terebinth. Acet., stimulant. Some of the liniments previously in use are modified in their composition, the chief alteration being in the Lin. Opii, which consists of equal parts of tincture of opium and of soap liniment, instead of being mixed in the proportion of one part of the former to three of the latter.

Liquores.—The solutions amount to the number of twenty-two. The new ones are the Liq. Antim. Terchlor., used externally, as a caustic; Liq. Atropiæ, used externally in anodyne lotions, and sometimes given internally, as a sedative, in doses of two to five minims; Liq. Calcis Saccharat., in which the sugar increases the solubility of the lime, tonic and antacid, given in half-ounce to ounce doses; Liq. Ferri Perchloridi, and Liq. Ferri Pernitratis, already described at page 233; Liq. Hydrarg. Nitratis Acid., a powerful caustic, and in very small quantity (half a minim to a minim, with an ounce of distilled water) useful in injections in cases of gonorrhœa; Liq. Potass. Permanganatis, possessing disinfectant properties; Liq. Sodæ Arseniatis, administered in one to five minim doses, as an alterative in squamous and some other forms of cutaneous diseases; and Liq. Strychniæ, administered as a tonic, in doses of three to ten minims. Liq. Arsenicalis is the new name for Liq. Potassæ Arsenitis, Liq. Chlori is the old Liq. Chlorinii, and Liq. Sodæ Chloratæ does not differ, in any important respect, from the Liq. Sodæ Chlorinatæ of the London Pharmacopœia.

Mellita.—Of the preparations containing honey as an ingredient, two, the Mel Rosæ and Oxytel Scillæ, have been omitted; none have been added, so that Mel Boracis, slightly different in composition from that of the Ph. Lond., and Mel Depuratum (Clarified Honey) are the sole representatives of this class.

Misturæ.—The Mist. Gentian. Co., and Mist. Spir. Vini Gallici (one of the most pleasant, although perhaps not most useful preparations in the Ph. Lond.), have been omitted. Mist. Creasoti, administered as a stimulant in doses of half-an-ounce to two ounces, and Mist. Scammonii, given as a purgative, in doses of two fluid drachms to an ounce, constitute the additions to this class. Mist. Ammoniaci is increased to double the strength of that of the Ph. Lond.; some changes have been made in the quantity of the ingredients used in making Mist. Ferri Co.; and Mist. Guaiaci contains one-fourth more guaiacum. The name of Mist. Acaciæ is replaced by that of Mucil. Acac., and Mist. Camph. is now designated Aq. Camph.

Mucilagenes.—Mucil. Traganth., which may be given freely as a demulcent, is added to this group. Mucil. Acac., formerly Mist. Acac. and Mucil. Amyli, hitherto called Decoct. Amyli, are old preparations under new names.

Pilulæ.—Five preparations, Pil. Aloes Comp., Pil. Aloes c. Sapone, Pil. Conii Comp., Pil. Ipecac. c. Scilla, and Pil. Styracis Comp., which existed in the Ph. Lond., have been omitted. Here, as in many other parts of the work, the judgment of the compilers of the British Pharmacopœia may be fairly called into question; the Pil. Conii Comp. possesses valuable important remedial properties in the treatment of phthisis and some other affections, and the others are certainly not altogether wanting in value, when administered in suitable cases. The additions are Pil. Aloes Barbadosensis (not very unlike the old Pil. Aloes c. Sapone in composition), Pil. Aloes et Assafoetid., Pil. Aloes Socotrin., Pil. Assafoetid. Comp., Pil. Colocynth. et Hyoscyami, Pil. Ferri Iodid., and Pil. Plumbi c. Opio. The three first-named possess purgative properties, and are given in doses of five to fifteen grains; Pil. Assafoetid. Comp. is stimulating and antispasmodic, in five to ten grain doses; Pil. Colocynth. et Hyoscyami is used as a purgative, in five to ten grain doses; Pil. Ferri Iodid. is given as a tonic and alterative, in doses of five to ten grains; and the last-named of the new pills is a valuable astringent in diarrhœa, &c. (dose, three to five grains). Several of the Pilulæ are more or less altered in composition, but the changes made in this respect do not materially affect the dose of each; in Pil. Rhei Comp. oil of peppermint is substituted for oil of caraway, a point which will be found of some importance in practice, as when the former oil was used in making the compound rhubarb pill of the Edinburgh Pharmacopœia, the unpleasant eructations produced by the peppermint frequently caused its discontinuance by patients to whom it was administered. As regards new names, Pil. Ferri Co. is now called Pil. Ferri Carb., Pil. Sapon. Co. is designated Pil. Opii., Pil. Galban. Co. is changed to Pil. Assafoetid. Co., and the name of Pil. Calomel Co. is substituted for that of Pil. Hydrarg. Chlor. Co.

Pulveres.—The powders omitted are Pulv. Aloes Comp., Pulv. Cinnamom Co., Pulv. Cretæ Co., and Pulv. Cretæ Co. c. Opio. The additions are Pulv. Amygdal. Co., formerly Conf. Amygdal., Pulv. Aromatic., used as an astringent in twenty to sixty grain doses, Pulv. Catechu Co., used as an astringent, in twenty to forty gr. doses, Pulv. Cretæ Aromi. formerly Conf. Aromat., astringent, in twenty to sixty gr. doses, Pulv. Cretæ Arom. c. Opio, astringent (doses, twenty to forty grs.), and Pulv. Rhei Co., purgative, when given in doses of a quarter to half an ounce. Besides the alterations in name already alluded to, the Pulv. Ipec. Co. of the Ph. Lond. is called Pulv. Ipec. c. Opio, and Pulv. Kino Co. is now designated Pulv. Kino c. Opio.

Spiritus.—In this group numerous changes have been effected. The omissions are Spir. Ammon. Foetid. (long a favourite and valuable remedy in certain forms of hysteria, &c.), Spir. Anisi, Spir. Carui, Spir. Juniperi Comp., Spir. Menth. Virid., Spir. Pimentæ, Spir. Pulegii. and Spir. Vini Gallici. The additions are Spir. Cajuputi, Spir. Juniperi, and Spir. Lavandulæ. With regard to the alterations which have been effected, Spiritus Ætheris, made by the admixture of ether and rectified spirit, in the proportion of one part of the former to two of the latter, presents a decided improvement over the old preparation, Spir. Ætheris Comp., commonly called Hoffman's Anodyne, which, although it has found a place in every edition of the London Pharmacopœia for the last seventy years, has always been difficult to obtain in a proper state, owing to the obstacles in the way of getting real oil of wine (Oleum Ethereum). A great improvement has also been made in the preparation of Spir. Ammonia Aromaticus, carbonate of ammonia and strong solution of ammonia having been substituted for the two chief ingredients hitherto used, hydrochlorate of ammonia and carbonate of potash. Spiritus Ætheris Nitrosi is still open to objection like its predecessor, the Spir. Ætheris Nitr. of the London Pharmacopœia. One of the ingredients, nitrite of soda, ordered for its composition, is always impure in the commercial state, and the analysis of several specimens by Professor Redwood, shows that it commonly consists of nitrate of soda, with a considerable proportion of carbonate of soda, and a very little nitrite; and until the purity of this ingredient can be depended upon, the old preparation of "sweet spirit of nitre" must be looked upon as preferable to the new one. Spiritus Chloroformi is an old and useful remedy, Chloric Ether, under a new name. Spiritus Camphoræ is rather weaker than the preparation formerly employed. The new spirits are those of cajuput, given in doses of ten minims to a fluid drachm as a stimulant, and antispasmodic, juniper, and lavender. The two latter, as well as the spirits of rosemary and of peppermint, partake of the characters of what have hitherto been called essences, and not of the preparations previously known as spirits. Spir. Juniperi, given as a diuretic in ten to twenty minim doses, contains ninety-five times as much oil of juniper as the Spir. Juniperi of the London Pharmacopœia; Spir. Menthæ Pip., used as a stimulant in doses of ten to twenty or thirty minims, is forty-five times stronger, and Spir. Rosmarini, stimulant, in twenty minim to drachm doses, contains thirty-one times as much oil as the old preparation bearing the same name. Spir. Lavandulæ, which is a new preparation, possesses stimulant properties when given in twenty or thirty minim doses.

Succi, or Juices.—This is a small, and entirely new class, comprising the expressed juices of conium, scoparius, and taraxacum. Succus Conii may be given as an anodyne and sedative in twenty to sixty minim doses; Succus Scoparii has a diuretic property when administered in doses of half a drachm to a drachm; and Succus Taraxaci, which is intended to represent a non-official preparation, Liquor Taraxaci, may be given in the same doses as the Succus Scoparii, as a diuretic, or in larger quantities in the treatment of chronic hepatic congestion.

Suppositoria.—Suppositories, form another new class of preparations, which might, especially when their very limited use is considered, have been left to the discretion of prescribers, instead of being authoritatively described in the British Pharmacopœia. There seems to have been some difference of opinion amongst the members of the Pharmacopœia Committee respecting the necessity for the introduction of this class, for only two suppositories, those of tannic acid (astringent) and morphia (sedative and anodyne) are named.

Syrups.—The omissions comprise the syrups of marsh-mallow, cochineal, saffron, buckthorn, sarsaparilla, and violets, none of which possess any

properties which render them worthy of retention in the Pharmacopœia. The additions are four in number: Syrup. Aurant. Flor., an agreeable tonic bitter in doses of one to four fluid drachms; Syrup Hemidesmi, diaphoretic and alterative in one to four drachm doses; Syrup. Scillæ (which replaces Oxy-mel Scillæ), possessing diuretic property, in doses of half a drachm to two drachms; and Syrup. Ferri Phosph., a very valuable preparation of iron, of which the dose is from one drachm to half an ounce for adults, and thirty minims to a drachm for a child of five years old. The directions given for the preparation of some of the syrups which have been retained differ considerably from those formerly laid down, but the doses remain unaltered.

Tincture.—This class is, as it has always been, the most numerous, and as many as fifty-six tinctures, being an increase of three over the number in the London Pharmacopœia, are described in the present work. Thirteen new tinctures have been added, nine old tinctures have been omitted, and twenty-one have been altered in composition, besides the changes which have been effected in nomenclature.

Maceration was the method formerly directed to be used in the preparation of all the tinctures; but in the British Pharmacopœia the directions given combine both maceration and percolation (the latter being a plan very excellent in itself) in a manner which, while it furnishes evidence of the indecision and want of unanimity of the Committee, is open to much objection on the score of incompleteness and ambiguity. Some of the ingredients from which the tinctures are made, are directed to be used in the form of fine powder; others, in moderately fine powder; others, again, are to be bruised; while some few are to be used in their ordinary condition. No reasons are given for using the ingredients in these different states, and it would be difficult, indeed to give any. Some of the other directions given are very vague; and, although the assertion of an eminent authority, Professor Redwood, that “the whole of the formulæ for the tinctures ought to be re-written,” is, perhaps, too sweeping, it cannot be denied that there is much room for improvement in this respect.

The new tinctures are the following:—Tinct. Arnicæ, stimulant and antispasmodic, in doses of half-a-drachm to two drachms; Tinct. Bucco, a local tonic in catarrhal inflammation of the bladder, and diuretic, in one drachm to half-ounce doses; Tinct. Cannabis Indicæ, sedative and anodyne, dose twenty minims to a drachm; Tinct. Chiratæ, tonic, in drachm doses; Tinct. Cocci, sometimes given as a stimulant (its action being chiefly due, however, to the spirit which it contains) in drachm doses; Tinct. Conii Fructus, sedative, in doses of twenty minims to a drachm; Tinct. Croci, supposed by some to possess a stimulant property (which may be accounted for similarly to the same alleged virtue of Tinct. Cocci), dose, one to two drachms; Tinct. Ergotæ, administered for the purpose of stimulating the contraction of the muscular fibres of the uterus, in drachm doses, and given in smaller quantities, as an emmenagogue; Tinct. Krameriæ, astringent, dose, half-a-drachm to two drachms; Tinct. Nucis Vomicæ, a bitter tonic, dose, three to fifteen minims; Tinct. Sabinæ, sometimes used as a stimulant or as an emmenagogue, in doses of half-a-drachm to two drachms; Tinct. Senegæ, a stimulating expectorant, dose, one to two drachms; Tinct. Stramonii, sedative and narcotic, dose ten minims to a drachm.

The tinctures which have been omitted are Tinct. Aloes Comp., Tinct. Ammon. Comp., Tinct. Cinchon. Pallid., Tinct. Colchici Comp., Tinct. Conii, Tinct. Cubeb., Tinct. Ergotæ Æther., Tinct. Ferri Ammon. Chlor., Tinct. Hellebori. Amongst those which have been altered in composition, the chief are Tinct. Aconiti, which has only one-third of the strength of Tinct. Aconiti, Ph. Lond.; Tinct. Aloes, in the process for making which the

water has been omitted ; Tinct. Belladonnæ, now made only half as strong as that of the London Pharmacopœia ; Tinct. Calumbæ, nearly twice as strong as the old tincture ; Tinct. Catechu, containing about one-third more catechu than that of the London Pharmacopœia ; Tinct. Cinnamomi, containing one-third more cinnamon ; Tinct. Ferri Perchloridi, in which the perchloride of iron is at once mixed with the spirit, instead of its being made in the course of the process, by the addition of hydrochloric acid to sesquioxide of iron, before the spirit is used, as in the corresponding preparation, Tinct. Ferri Sesquichlor., Ph. Lond. ; Tinct. Rhei, nearly twice the strength of the old preparation ; Tinct. Sennæ, and Tinct. Serpentariæ, each increased to about one-third stronger ; Tinct. Tolutana, and Tinct. Zingib., the former of which contains nearly twice as much balsam of tolu and the latter just twice as much ginger as was contained in the old tinctures of the same names.

The changes in nomenclature are as follows:—Tinct. Camph. Co. is now called Tinct. Camph. c. Opio ; Tinct. Cinchon. is now termed Tinct. Cinchon. Flav. ; Tinct. Colchici is changed to Tinct. Colchici Semin. ; Tinct. Ferri Sesquichlor. to Tinct. Ferri Perchlor. ; Tinct. Iodin. Co. is altered to Tinct. Iodi. ; and the designation Comp. is discontinued in the names of Tinct. Rhei. Comp. and Tinct. Sennæ Comp.

Trochisci.—This new group, Lozenges, includes six preparations : Troch. Acid. Tannic., Tannin Lozenges, in which the mass is divided into lozenges, each containing half a grain of tannic acid ; Troch. Bismuth., each of which contains two grains of nitrate of bismuth, or white bismuth, as it is called in the new Pharmacopœia ; Troch. Catechu, each containing one grain and a quarter of catechu ; Troch. Morphiæ, containing one thirty-sixth of a grain of hydrochlorate of morphia ; Troch. Morph. et Ipecac., each of which contains one thirty-sixth of a grain of hydrochlorate of morphia, and one twelfth of a grain of ipecacuanha ; Troch. Opii, containing one-tenth of a grain of extract of opium in each lozenge. The quantity of these lozenges to be given as a dose depends, of course, upon the quantity of the active ingredient contained in each.

Unguenta.—The following new ointments have been introduced : Ung. Aconitæ, and Ung. Atropiæ, possessing anodyne properties ; Ung. Gallæ, having an astringent action ; Ung. Calomelanos, and Ung. Hydrarg. Iodid. Rubr., alterative and resolvent ; Ung. Cocculi, sometimes used for the purpose of destroying pediculi, &c. ; Ung. Plumbi Carb., Ung. Plumbi Subacet., and Unguent. Simplex, used as emollient applications ; Ung. Terebinth., and Ung. Veratriæ, possessing stimulant and irritant properties. Several of the old ointments have been omitted, or altered in composition. Ung. Antim. Pot. Tart. has had its name changed to Ung. Ant. Tartar., Ung. Gallæ Co. is called Ung. Gall. c. Opio. ; Ung. Hydr. Ammon. Chlor. is termed Ung. Hydr. Ammon. ; Ung. Hydr. Nit. Oxyd. is designated Ung. Hydr. Oxyd. Rubr. ; Cerat. Resinæ, and Cerat. Plumbi Co., are now termed respectively Ung. Resinæ and Ung. Plumb. Co. ; and Ung. Zinci is altered to Ung. Zinci Oxyd.

Vina.—The Vinum Veratri has been omitted. In Vin. Aloes, cardamoms and ginger are substituted for canella ; in making Vin. Ferri, tartarated iron is directed to be used instead of iron filings ; Vin. Ipecac. contains one-fifth less of ipecacuanha ; and Vin. Opii is made simply with opium and sherry, the cinnamon and cloves formerly employed having been omitted.

The Appendices to the British Pharmacopœia require but little notice here. Although not absolutely necessary, they contain much valuable special information ; while they are, in a great measure, free from the numerous errors, both of omission and of commission, which detract from the accuracy and utility of the other portions of this national work.

With the present article our remarks upon the British Pharmacopœia end ; but the necessity which exists for a complete revision of this work, and which has been freely expressed by every member of the Profession, from the President of the London College of Physicians downwards, renders it highly probable that at no distant period we shall have to resume our observations, in consequence of the extensive alterations which will be effected by the Committee to which the task of revision will be entrusted.

THE MONTH.

THE CRISIS IN THE ARMY MEDICAL DEPARTMENT.

THE repeated indignities and injustice to which the Army Medical Officers have so long been subjected have gradually brought about a condition of things which cannot fail to be very detrimental to the interests of the service. First, came a difficulty in getting sufficient candidates to present themselves for examination to fill the vacant posts ; an attempt was made to remedy this by an extension of the age at which candidates would be admitted, to thirty years, but the utter failure of this scheme was evidenced by the fact that only fourteen candidates presented themselves, and out of this very small number three were found to be physically disabled, four were rejected as professionally incompetent, and seven only were accepted. There are now upwards of two hundred medical vacancies, many of which have been caused by the resignation of medical officers disgusted with the service in the British and Indian armies, which must, of course, be filled up, and as a *dernier ressort* it has been determined to have recourse to the temporising expedient, hitherto unheard-of in time of peace, of filling up the gap by means of *Acting Assistant-Surgeons*. The following advertisement, which appeared in the "Times" of April 26th, is a proof of the awkward fix in which the authorities are now placed, through their obstinate refusal to listen to the just and moderate claims of the Army Medical Officers for redress of their grievances :—

"Army Medical Department, 6, Whitehall Yard, 22nd April, 1864.—Acting Assistant-Surgeons being required for temporary service with the army in the United Kingdom, gentlemen duly registered to practise medicine and surgery under the new Medical Act of 1858, and desirous of obtaining such appointments, may apply immediately to the Director-General for the printed form required to be filled up by every candidate previous to employment. They will receive pay at the rate of 10s. a-day and allowances equal to those of a Staff Assistant-Surgeon. Gentlemen are not eligible for these appointments whose age exceeds forty years.

"G. B. GIBSON, M.D., Director-General."

It remains to be seen whether this desperate attempt to draw together a sufficient number of candidates, who, from the uncertain tenure of their appointment, will be still more at the mercy of the Army Medical Department than the gentlemen who now hold permanent posts, will be successful; but, even if it should enable the authorities to struggle on for a little while longer under the existing system, the day must come, sooner or later, when the claims of the medical officers in the army must be properly settled. In the meantime the question is assuming considerable public importance, for the sanitary welfare of our troops is a point which has a direct bearing upon the interests of the whole community.

MEDICAL INTELLIGENCE.

MEDICAL BENEVOLENT COLLEGE.—We are glad to see that the anniversary dinner of this excellent institution, on May 14, will be presided over by Sir Charles Locock. Peers of the realm have hitherto occupied the chair, and we thank them for the aid given; we are now gratified to see a member of our profession announced for the Twelfth Annual Festival, and we hope that our brethren will add their names to the Stewards' list in considerable numbers, thus testifying their respect for the Chairman, and their unabated zeal to further the continued success of their College. Miss Margaret Good (daughter of the late eminent Dr. Mason Good) has lately bequeathed to the College the sum of £250, free of duty.

BETHLEHEM HOSPITAL.—On April 9th, a special meeting of the Governors of Bethlehem Hospital was held respecting the site of the hospital; Mr. Alderman Copeland said the Commissioners in Lunacy having recommended to Sir G. Grey that the hospital should be removed from its present site to the country, to make room for St. Thomas's Hospital, the Governors were prepared with a great deal of evidence in favour of the present site. Mr. A. M. Jeaffreson (the Secretary) read a communication from Mr. Lawrence, surgeon to the hospital, and senior surgeon to St. Bartholomew's Hospital, which stated that the Commissioners in Lunacy sought to obtain the assistance of Sir George Grey, in order to enforce an arrangement which was most repugnant to the Governors, forgetting that their power, as far as Bethlehem was concerned, was simply confined to that of visiting. Without any examination on his part, the Home Secretary endorsed the strange proposal for taking down one of the handsomest and best constructed hospitals in London. The

present site of Bethlehem was perfectly suited in healthiness either for lunatics or as a general hospital. Instead of being confined, the site of the hospital was remarkably open. He disapproved entirely the recommendations of the Commissioners in Lunacy. The opinion of Dr. Goode was read. He was in favour of the present site from his personal experience of ten years. At present it enjoyed many advantages, and the hospital, instead of being hemmed in by buildings, was peculiarly free and open. If the hospital was removed 10 or 20 miles into the country, how were the patients to be removed to the hospital? The sanitary condition of the neighbourhood was good. The site was healthy, and the position good, and he hoped that the hospital would be maintained in its present condition. Dr. Wood, one of the medical officers of St. Luke's Hospital, and formerly of Bethlehem Hospital, said no good reason had been advanced why the hospital should be removed. Bethlehem was one of the finest buildings in London, and taking the grounds of Bethlehem, with its 11 acres and 200 patients, and Hanwell with 28 acres, farm of 77 acres, and 1,600 patients, there was considerably more space at Bethlehem per head than at Hanwell. The hospital was singularly and exceptionably healthy. When cholera was raging in London, and people were dying literally at the very doors of the hospital, not a single case happened among the inmates. After some further evidence had been taken, the meeting was adjourned.

BRITON MEDICAL AND GENERAL LIFE ASSOCIATION.—The tenth annual meeting of the Briton Medical and General Life Association was held lately at their offices, 429, Strand. Mr. Francis Webb occupied the chair. By the report, it appears that during the past year, 3,147 proposals had been received for assuring £746,425; 2,328 policies were issued, assuring £567,453, and producing a new income of £18,362 2s., being more than 20 per cent. over the new premiums of the previous year. The income of the Association was £113,000, of which £45,100 had been carried to the reserve fund. The assets now amounted to £216,312. A bonus was declared, which was equivalent to a reversionary bonus of 40 per cent. on the premiums paid in the past three years.

THE BRITISH ASSOCIATION will hold its next meeting at Bath during the week commencing Wednesday, September 14th, under the presidency of Sir Charles Lyell, F.R.S.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—This Society, founded in 1788, and now giving, in half-yearly and other relief, about £2,000 a year, has, within the past week, received a Royal Charter of Incorporation, and is become the Society for the Relief of Widows

and Orphans of Medical Men, the name having been shortened. The anniversary dinner is on the 28th of May next, at the Albion Tavern, Aldersgate-street: the President, T. A. Stone, Esq., in the chair.

EPIDEMIOLOGICAL SOCIETY.—This Society held its annual meeting at its rooms, in Soho Square, on Monday, April 4th. The report of the Council, as read by the Honorary Secretary, as well as the annual statement presented by the Honorary Treasurer, showed the condition of the Society to be satisfactory and flourishing; the number of members had increased during the past year, and the Society was altogether free from debt. The following office-bearers were elected for the session 1864–5. *President*: Gavin Milroy, M.D., F.R.C.P. *Vice-Presidents*: His Excellency the Earl of Carlisle, K.G.; the Earl of Shaftesbury, K.G.; the Right Hon. W. Cowper, M.P.; B. G. Babington, M.D., F.R.S.; H. W. Acland, M.D., F.R.S.; A. Bryson, M.D., F.R.S., R.N.; E. Chadwick, Esq., C.B.; W. D. Chowne, M.D., F.R.C.P.; J. Copland, M.D., F.R.S.; W. Farr, M.D., F.R.S.; J. B. Gibson, M.D., C.B.; W. Jenner, M.D.; Sir J. Liddell, M.D., F.R.S., C.B.; Sir J. R. Martin, C.B., F.R.S.; C. Murchison, M.D., F.R.C.P.; A. Nisbett, M.D., R.N.; J. Simon, Esq., F.R.S.; Sir A. Smith, M.D., K.C.B.; T. Watson, M.D., F.R.S. *Foreign and Colonial Secretaries*: W. Lewis, M.D., Belgium and France; H. Weber, M.D., and W. E. Swaine, M.D., Germany and Russia; R. G. Latham, M.D., F.R.S., Sweden, Norway, and Denmark; A. Bryson, M.D., R.N., F.R.S., Portugal and the Brazils; W. Camps, M.D., Egypt and Syria; J. Bird, M.D., East Indies; W. Dickson, M.D., R.N., West Indies and North America. *Treasurer*: W. Camps, M.D. *Secretary for the Navy*: Dr. Mackay, R.N. *General Secretary*: J. N. Radcliffe, Esq. *Other Members of Council*: C. J. B. Aldis, M.D.; F. G. Burge, Esq.; A. Crawford, M.D.; Colonel Hough; E. Hart, Esq.; E. Haward, Esq.; C. F. J. Lord, Esq.; H. Letheby, M.B.; J. F. Marson, Esq.; C. Morehead, M.D.; W. Odling, M.B., F.R.S.; B. W. Richardson, M.D.; J. B. Sander-son, M.D.; E. C. Seaton, M.D. After the election of office-bearers, Dr. Babington, on retiring from the chair, which he has occupied for thirteen years, delivered an address on the "Origin, Present Position, and Prospects of the Society."

ANALYSIS OF FOOD.—A paper has recently been read before the Brighton Literary and Scientific Institution upon the effects of the adulterations of food upon the public. The essay, which was written by a lady, who is a zealous advocate of sanitary reform, elicited considerable discussion, and has since been published, in a separate form, as a pamphlet, with the opinions of the speakers, all of whom coincided with

the authoress on the necessity for the appointment of public analysts.

SOCIETY OF PHYSICIANS OF VIENNA.—The following gentlemen have been elected corresponding members of the Society of Physicians of Vienna: Dr. W. A. F. Browne, Dr. W. Farr, Dr. Lockhart Robertson, Dr. D. Skae, Dr. Sieveking, Dr. Conolly, and Mr. Toynbee.

STATISTICAL SOCIETY (Founded 1834). COUNCIL AND OFFICERS FOR 1864-65.—*President*: Colonel W. H. Sykes, M.P., F.R.S. *Council*: Charles Babbage, M.A., F.R.S.; *Colonel George Balfour; James Bird, M.D.; Sir John Boileau, Bart., F.R.S.; Samuel Brown, Esq.; William Camps, M.D.; *James Caird, M.P.; *Edwin Chadwick, Esq., C.B.; *Leonard Henry Courtney, Esq.; William Farr, M.D., D.C.L., F.R.S.; Right Hon. Earl Fortescue; William Augustus Guy, M.B.; James Thomas Hammick, Esq.; Frederick Hendriks, Esq.; James Heywood, F.R.S.; William Barwick Hodge, Esq.; Charles Jellicoe, Esq.; Leone Levi, F.S.A.; William Golden Lumley, LL.M.; Right Hon. Holt Mackenzie, F.R.G.S.; Matthew Henry Marsh, M.P.; Right Hon. Lord Monteagle, F.R.S.; *Sir Roderick Impey Murchison, K.C.B., G.C.St.S., D.C.L., LL.D.; William Newmarch, F.R.S.; Frederick Purdy, Esq.; Colonel W. H. Sykes, M.P., F.R.S.; *W. Tite, M.P.; Major-General Sir A. M. Tulloch, K.C.B.; Richard Valpy, Esq.; Cornelius Walford, Esq.; Rev. William Whewell, D.D., F.R.S. Those marked* are new Members. *Treasurer*: William Farr, M.D., D.C.L., F.R.S. *Honorary Secretaries*: William Augustus Guy, M.B.; William Golden Lumley, LL.M.; Frederick Purdy, Esq.

ROYAL COLLEGE OF SURGEONS.—The Council has just awarded the Jacksonian Prize to Dr. Morell Mackenzie, of George Street, Hanover Square, for his essay on "The Pathology and Treatment of Diseases of the Larynx." There was no competitor for the prize on the Normal and Pathological Anatomy of the various Synovial Bursæ connected with the muscles and tendons of the upper extremity. There are three subjects for prizes for the present year, viz.: "Club Foot; its Causes, Pathology, and Treatment;" "The Diseases of the Ankle-Joint, and the Joints and Bones of the Tarsus, requiring Surgical Treatment; and stating the Treatment, including Operative, most suitable in each case, with the results thereof;" and "The Malformation, Diseases, and Injuries of the Fingers and Toes, with their Surgical Treatment. The Dissertation to be illustrated by Preparations and Drawings." The following is the subject for the Collegiate Triennial Prize to be sent in on or before Christmas Day next: "The Structural Anatomy and Physiology of the

Lymphatic Vessels and Glands (the Anatomical Distribution not being required); the communications (if any) between the Lymphatics and the Blood-vessels to be demonstrated; and the influence (if any) which the Lymphatic Vessels or Glands exercise on the fluid they transmit, to be elucidated. The Dissertation to be illustrated by Preparations and Drawings."

THE ARMY MEDICAL LIBRARY AT ALDERSHOT, founded by Dr. Gibson, the present Director-General, has recently received a very important addition in the contribution, by Dr. Fleming, of 139 volumes.

PUBLIC HEALTH.—It appears from a careful analysis, extending over a lengthened term of years, that the annual death-rate at all ages and from all causes was as follows in various parts of England and Wales:—London, 2·363 per cent.; the south-eastern counties, 1·955 per cent.; the south midland counties, 2·044 per cent.; the eastern counties, 2·058 per cent.; the south-western counties, 2·001 per cent.; the west midland counties, 2·237 per cent.; the north midland counties, 2·111 per cent.; the north-western counties, 2·550 per cent.; Yorkshire, 2·309 per cent.; the northern counties, 2·199 per cent.; and Monmouthshire and Wales, 2·126 per cent. The south-eastern counties would thus appear to be the healthiest, and the north-western counties the unhealthiest, in England. The expression "London" includes a population of 2,803,989. The rate of mortality in Lancashire and Cheshire is relatively very high, and the sanitary reforms likely to be secured by "The Public Works Act, 1863," are evidently urgently needed. Thus, the death-rate from all causes and at all ages in Lancashire and Cheshire has averaged 2·550 per cent. per annum. Assuming that it could be reduced one-half per cent., 14,678 lives would be saved annually, or 146,780 in ten years, without allowing for the increase of population naturally arising, and taking the census numbers of 1861 as the basis of the calculation.

NEW REMEDY.—We have lately had submitted to our notice a very useful addition to the list of external therapeutical agents, in the form of sea salt, manufactured by Messrs. Tidman and Sons. The various imitations of sea salt hitherto brought forward have been chemically prepared, and are almost destitute of remedial virtue; but as that made by Messrs. Tidman is obtained from sea water itself, it contains, as has been shown by a careful analysis by Dr. Hassall, all the saline characteristics of sea water. Added to fresh water, in the proportion of five ounces to the gallon, a mixture having the specific gravity of sea water, namely 1·026, is obtained, and for all cases in which bathing is requisite, it will be found a valuable adjunct to the water used for the bath.

PASS-LISTS.

CAMBRIDGE UNIVERSITY.—At a congregation held on April 7th, the following Degrees were conferred:—M.D.; P. W. Latham, Downing.—M.B.; W. Balls, Peterhouse.

ROYAL COLLEGE OF PHYSICIANS, LONDON.—MEMBER.—At a general meeting of the Fellows, held on April 18th, Augustus Ward Clement, 78, Upper Berkeley-street, formerly an Extra-Licentiate of the College, was duly admitted a Member.—LICENTIATES.—The following gentlemen, having undergone the necessary examination, were admitted as Licentiates:—Bertin, Henry Victor, Alpha-road, Regent's-park; Blanchet, J. B., M.D., Quebec, Canada; Currie, John Legge, Charterhouse-square; Hooker, Edward M. C., Hadlow, Tunbridge; Hunt, Henry John, Portugal-street, Lincoln's Inn-fields; Nash, Andrew, Victoria, Australia; Perks, Charles, Lichfield; Pyle, George Edward, Middlesex Hospital; Waugh, Alexander, Corsley, Warminster; Whipple, Connell, Plymouth; Wilson, William Samuel, Hereford-road North, Bayswater; Wolferstan, Sedley, Plymouth. On the same day, the following gentlemen were reported by the Examiners to have passed the first part of the professional examination for the Licence:—Barrett, Howard, St. George's Hospital; Court, Josiah, Guy's Hospital; De Tatham, Hamilton, St. Mary's Hospital; Fennings, Allen, Charing-cross Hospital; Gould, Franklin, King's College; Griffiths, Richard S. P., St. Mary's Hospital; Humphreys, Frederick William, Guy's Hospital; Iliffe, William, St. Bartholomew's Hospital; Kenyon, George Arthur, St. George's Hospital; Lattey, Walter, St. George's Hospital; Ransford, Gifford, St. George's Hospital; Wilford, John G. F., Guy's Hospital; Wilson, William S., Westminster Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Court of Examiners on April 12th, and, when eligible, will be admitted to the pass examination:

Berry, O. W., Charing-cross Hosp.
Brown, G. A., King's College
Bryan, E., St. Bartholomew's Hosp.
Bushel, S. W., Guy's Hosp.
Butler, W. H., Guy's Hosp.
Cass, W. C., University College
Coghlan, W. B., St. Thomas's Hosp.
Dowse, T. S., Charing-cross Hosp.
Ewen, A., Guy's Hospital
Fennings, A., Charing-cross Hosp.
Foulds, H. J., Charing-cross Hosp.
Gill, J., Guy's Hospital
Gowing, B. C., Guy's Hosp.
Harris, C. J., Middlesex Hosp.
Hickman, R. M., King's College
Hoffmeister, W., University College
Huet, C. W., Middlesex Hosp.

Husband, H. A., St. Barthol. Hosp.
Land, W. J., St. Mary's Hosp.
Ley, Richard, London Hosp.
Nowell, R. B., Guy's Hosp.
Oakley, J., King's College
Parsons, W. A., Birmingham
Richardson, W. E., Leeds
Sargent, J. F., St. Mary's Hosp.
Shoppee, E. C., University College
Simpson, R. P., St. Barthol. Hosp.
Stuart, R., Guy's Hosp.
Thomas, J., Guy's Hosp.
Verity, A. R., Charing-cross Hosp.
Walters, J. H., Guy's Hosp.
Weekes, H., Guy's Hosp.
Worthington, J. C., Middlesex Hosp.

The following gentlemen passed their primary examinations on April 13th :—

Atkins, F. G., St. Mary's Hosp.
Bainbridge, George, Leeds
Barrett, Howard, St. George's Hosp.
Batteson, Joseph, Guy's Hosp.
Denne, Henry, Guy's Hosp.
Farrington, A. C., St. Barthol. Hosp.
Fennell, Theodore, St. Barthol. Hosp.
Griffiths, R. S. P., St. Mary's Hosp.
Hughes, J. H., Dublin
Iliffe, William, St. Barthol. Hosp.
Jones, Alfred, Middlesex Hosp.
Kerswill, J. B., King's College
King, T. R., Edinburgh
Langley, J. T., St. Barthol. Hosp.
Lewis, C. G. M., Birmingham
Major, N. B., St. Mary's Hosp.
Morris, Henry, Guy's Hosp.

Nunneley, F. B., University College.
Place, T. L., St. Bartholomew's Hosp.
Raine, G. R., Guy's Hosp.
Renshaw, Edwin, St. Barthol. Hosp.
Rogers, H. C., St. Barthol. Hosp.
Rust, H. R. G., St. Barthol. Hosp.
Searle, G. C., St. George's Hosp.
Spooner, E. M., London Hosp.
Swindale, John, Middlesex Hosp.
Taylor, H. S., Guy's Hosp.
Thorp, Disney, London Hosp.
Tidswell, T. H., Charing-cross Hosp.
Todd, W. J., King's College
Underhill, F. W., St. George's Hosp.
Walker, Alfred, London Hosp.
Webb, G. F., St. Barthol. Hosp.
Wright, E. S., London Hosp.

The following gentlemen passed the primary examination on April 14th :—

Atherstone, E., King's College
Bate, G. P., Westminster Hosp.
Birtwell, H. H., St. Thomas's Hosp.
Burt, W. J., St. George's Hosp.
Cadle, J. F., Middlesex Hosp.
Cole, E. F. J., King's College
Costelloe, Daniel, Dublin
Eaton, J. C., St. Bartholomew's Hosp.
Fair, Campbell, Dublin
Goodworth, R. P., London Hosp.
Greening, R. J., King's College
Hampshire, F. K., St. George's Hosp.
Helsdon, C. V., Middlesex Hosp.
Hulme, S. J., Manchester
King, John, King's College
Llewellyn, Rees, London Hosp.

Mainsty, T. S., King's College
Marshall, Frederick, King's College
Melhade, A. C. B., St. Barthol. Hosp.
Metcalf, Fenwick, King's College
Nell, R. F., King's College
Noel, V. E., Middlesex Hosp.
Plomley, J. F., King's College
Raby, John, St. Thomas's Hosp.
Rix, R. A., St. Bartholomew's Hosp.
Roper, R. G., St. Barthol. Hosp.
Sainsbury, Henry, Birmingham
Sharp, David, St. Barthol. Hosp.
Smith, J. W., King's College
Thomas, William, Birmingham
Wane, W. J., St. Barthol. Hosp.
Ward, F. H., St. Thomas's Hosp.

The following gentlemen passed on April 19th :—

Adams, J. O., St. Barthol. Hosp.
Bateman, Francis, St. Barthol. Hosp.
Body, H. M., Charing-cross Hosp.
Bruorton, William, St. George's Hosp.
Denziloe, W. Le G., St. Mary's Hosp.
Firmin, C. G., Middlesex Hosp.
Foxon, C. F. C., St. George's Hosp.
Hallett, Littleton, St. Barthol. Hosp.
Haslam, James, Guy's Hosp.
Haydon, N. T. J., St. Mary's Hosp.
Hembrough, J. W., St. Barthol. Hosp.
Hett, Geoffrey, King's College
Hill, A. F., King's College
Hocken, C. E., St. George's Hosp.
Jacques, J. T., St. Barthol. Hosp.
Kelly, Charles, King's College
Knipe, W. M., Guy's Hosp.
Knott, S. J., St. Mary's Hosp.

Leah, Thomas, St. Mary's Hosp.
Maberley, G. F., St. Barthol. Hosp.
Manby, F. E., Guy's Hosp.
Martin, A. H., University College
Müller, Augustus, St. Mary's Hosp.
Oldham, Samuel, Manchester
Packman, R. Y. V., Charing-cross H.
Perkins, J. S. S., Guy's Hosp.
Reid, L. H., St. Barthol. Hosp.
Rundle, Henry, St. Barthol. Hosp.
Sims, F. M. B., St. George's Hosp.
Smith, R. S., King's College
Spencer, G. O., University College
Stuart, W. A., University College
Tindall, A. M'I., St. Barthol. Hosp.
Visick, Clarence, St. George's Hosp.
Watson, G. S., St. George's Hosp.

The following gentlemen passed on April 20th :—

Ackroyd, George, Leeds
 Brigstocke, C. A., St. Barthol. Hosp.
 Budd, H. G., Guy's Hosp.
 Bywater, T. E. G., Leeds
 Corte, A. A., King's College
 Davis, W. F. P., Manchester
 De Tatham, H., St. Mary's Hosp.
 Evans, E. C., King's College
 Flower, Thomas, Middlesex Hosp.
 Goodall, Joseph, St. Barthol. Hosp.
 Gronow, O. T., St. Mary's Hosp.
 Hawett, William, Guy's Hosp.
 Hickinbotham, James, Birmingham
 Hussey, J. F., King's College
 Jones, W. G., Middlesex Hosp.
 Logg, R. D., University College
 Lucas, Herbert, Guy's Hosp.

Palmer, Clement, Guy's Hosp.
 Pritchard, G. F., King's College
 Pughe, Richard, Middlesex Hosp.
 Renshaw, W. A., Manchester
 Riley, Joseph, Guy's Hosp.
 Robinson, Robert, St. Barthol. Hosp.
 Smith, H. C., Guy's Hosp.
 Stevens, G. J. B., Guy's Hosp.
 Sutcliffe, W. G., Charing-cross Hosp.
 Webb, J. H., St. Mary's Hosp.
 White, J. A., Manchester
 Whiting, Henry, Guy's Hosp.
 Wigg, H. C., University College
 Williams, R. M., Middlesex Hosp.
 Worsley, J. H., Manchester
 Wright, J. H., King's College

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination, and were admitted as Licentiates, on April 7th :—Beardsall, William George, Worksop, Notts ; Firth, Arthur Roberts, Richmond, Surrey ; Rayner, Henry, and Siddall, Joseph Bower, St. Thomas's Hospital. As an Assistant : Williams, James, Wokingham. On the same day, the following gentlemen passed their First Examination :—Gould, Franklin, King's College ; Iliffe, William, St. Bartholomew's Hospital ; Malin, George Warcup, Guy's Hospital. The following Licentiates were admitted on April 14th :—Lamb, George, Hull ; Lush, William G. V., Wilton, near Salisbury ; McMahon, James Thomas, Rochester-terrace, Camden Town ; Rowan, Andrew, Station-terrace, Hull ; Shaw, Thomas Claye, Stockport. On the same day, Lloyd, Thomas Franklin, Guy's Hospital, passed his First Examination. On the 21st of April, the following gentlemen obtained the Licence to practise :—Istance, Richard, Carmarthen ; Gunning, John Edmund, Surbiton, Surrey ; Murphy, J. C. N., 75th Regiment ; Bain, J. W. D., Brunswick-terrace, Blackwall.

MEDICAL VACANCIES.

LEEDS FEVER HOSPITAL.—For a Resident Medical Officer, in the place of Mr. Corrie, who has resigned. Salary £100 per annum, with board, lodging, and washing. Candidates, who must hold the Hall diploma, are required to attend a meeting of the Physicians on May 5th, at 3 P.M. Election by the Physicians, on May 7th.

COTON HILL ASYLUM, STAFFORD.—For an Assistant Medical Officer. Salary £60 per annum, with board, &c. Applications to be sent to the Superintendent, Dr. Hewson, of whom further information can be obtained.

GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY, CARDIFF.—For a House-Surgeon. Salary £100 per annum, with furnished apartments, coals, gas, and attendance. Applications with testimonials to be addressed to the Chairman of the Committee, on or before May 3rd.

MEDICAL APPOINTMENTS.

ALLINGHAM, W., Esq.—Assistant-Surgeon to St. Mark's Hospital for Fistula and Diseases of the Rectum.

- ANSTIE, F. E., M.D.—Lecturer on Materia Medica and Therapeutics at the Westminster Hospital School.
- BAKER, S. J., Esq.—Surgeon to the Berks County Gaol.
- BLAND, G., Esq.—Medical Officer to the Eastchurch District and the Workhouse of the Sheppey Union, Kent.
- CARTER, T. A., M.D.—Physician to the Leamington Hospital.
- CHALDECOTT, T. A., M.D.—Medical Officer for District No. 1, and the Workhouse of the Chertsey Union.
- CLARKE, F. W., Esq.—Medical Officer for District No. 5 of the Abingdon Union.
- COOPER, A., Esq.—Assistant-Surgeon to St. Mark's Hospital for Fistula and Diseases of the Rectum.
- DADE, R., Esq.—Medical Officer for the Southern District of the Reigate Union, Surrey.
- ELLERTON, J., M.D.—House-Surgeon to the North Riding Infirmary, Middlesborough-on-Tees.
- FAIRWEATHER, A. F., M.B.—Medical Officer for the Parish of Balfron, Glasgow.
- FERRIS, J. S., Esq.—Resident Medical Officer at the Bloomsbury Dispensary.
- GRIMSHAW, T., M.B.—Physician to the Cork Street Fever Hospital, Dublin.
- HALL, J., Esq.—Medical Officer for No. 3 District of the Dursley Union.
- HARRIS, W., M.D.—House-Surgeon to the Bristol General Hospital.
- HARRISON, R., Esq.—Demonstrator of Anatomy at the Liverpool Royal Infirmary School of Medicine.
- HARRISON, G. W., Esq.—Assistant House-Surgeon to the Birkenhead Borough Hospital.
- HEMMING, C., M.D.—Medical Officer for District No. 4, of the Abingdon Union.
- HOLYOAKE, T., Esq.—Junior House-Surgeon to the Liverpool Royal Infirmary.
- HOYLE, R. C., Esq.—Medical Officer to the Abbotsham District of the Bideford Union.
- IRVINE, G. R., M.D.—Assistant Medical Officer to the Rainhill Lunatic Asylum, near Liverpool.
- KENNEDY, H., M.D.—Physician to the Cork Street Hospital, Dublin.
- LEACH, J. C., Esq.—Assistant House-Surgeon to the Bristol General Hospital.
- LOWE, E., Esq.—Medical Officer to the County Gaol, Worcester.
- MACKAY, W. M., Esq.—Medical Officer for the Lasingham District of the Pickering Union, Yorkshire.
- MALLAM, H. P., Esq.—Medical Officer to the Workhouse and Industrial School, Oxford.
- MORE, J., M.D.—Medical Officer to the Bothwell District of the Kettering Union.
- MULREANY, J., M.D.—Medical Officer for the Northern District of the Parish of Clerkenwell.
- NASH, G., Esq.—House-Surgeon to the Liverpool Royal Infirmary.
- NUNNELEY, T., Esq.—Surgeon to the General Infirmary, Leeds.
- PHILLIPPS, A., Esq.—Resident Surgeon to the Manchester Workhouse.
- PHILIPSON, G. H., M.B.—Physician to the Royal Asylum for the Blind, Newcastle-on-Tyne.
- ROBERTS, R., Esq.—Surgeon to the Festiniog Hospital.
- ROBERTSON, G., Esq.—Medical Officer for the Thornton Dale District of the Pickering Union.
- SHORTT, J., Esq.—Medical Officer for the Southern District of the Dublin Union.

- SMELLIE, J., M.D.—Medical Officer to the No. 5 District of the City of Glasgow.
- SMITH, Samuel, Esq.—Consulting Surgeon to the General Infirmary, Leeds.
- SOPER, R. W., Esq.—House-Surgeon to the Loughborough Dispensary.
- SOUTHEY, R., M.B.—Physician to the Royal General Dispensary, Bartholomew Close.
- TEALE, T. P., junior, Esq.—Surgeon to the Leeds Infirmary.
- THOMPSON, W. A., Esq.—Medical Officer for the several parishes of the Incorporation of the Poor, Oxford.
- TODD, J. W., Esq.—Medical Officer to the Whittingham District of the Rothbury Union, Northumberland.
- TRAVERS, R., M.B.—Professor of Medical Jurisprudence in the University of Dublin.
- TWIGG, W., M.D.—Medical Officer for the Union House and Fever Hospital, of the Dungannon Union, county Tyrone.
- WARD, W., M.D.—Medical Officer for the Horncastle District and Workhouse of the Horncastle Union.
- WHARTON, J. H., Esq.—Surgeon to the Fever Hospital, Cork Street, Dublin.
- WHEELHOUSE, C. G., Esq.—Surgeon to the General Infirmary, Leeds.
- WILLIAMS, W., Esq.—Surgeon to the Festiniog Hospital.
- WILLETT, C. V., Esq.—House-Surgeon to the Great Northern Hospital.
- WOODMAN, William R., M.D.—Surgeon to the N Division of the Metropolitan Police.

DEATHS.

- ALSTON, H. M., M.D., at Dalry, Ayrshire, on April 10, aged 49.
- BEAUMONT, James, Esq., at Wetherby, on March 31, aged 75.
- BLACK, T. H., Esq., at Marcus-square, Newry, on March 30.
- BOULTON, J., Esq., at Stone, Staffordshire, on April 1, aged 56.
- BREMNER, Alexander, Esq., late Surgeon in the Army, at Keith, Banffshire, on April 9, aged 73.
- COLLIGAN, W. W., Esq., at Johnstone, Paisley, on April 2, aged 31.
- COLLYNS, C. P., Esq., at Dulverton, Somerset, on April 7, aged 70. The deceased was President of the West Somerset Branch of the British Association at the time of his death. His work on the "Red Deer of Devon," published a few years since, is full of matter interesting alike to the lover of natural history and to the sportsman.
- CUMPSTONE, W., Esq., at Market-Rasen, Lincolnshire, on April 13, aged 28.
- DIXON, F. B., M.D., at Hackney, on April 4, aged 50.
- DUCAT, C., M.D., late of the East India Company's Medical Service, at Hastings, on April 18.
- HAWORTH, G., M.D., of Brunswick-street, Manchester, formerly of Accrington, on April 8, aged 41.
- HENDERSON, J., Esq., R.N., Deputy Inspector-General of Hospitals and Fleets, at Belgrave-terrace, Lee, Kent, on March 31.
- HILDYARD, J. G., Esq., Consulting Surgeon to the Louth Dispensary, at Louth, Lincolnshire, on March 30.
- McCOMBE, Thomas S., Esq., at Antrim, Ireland, on April 12, aged 38.
- MAYNE, R., M.D., at Upper Gloucester-street, Dublin, on April 9, aged 53.
- PARKES, J., Esq., of the Wylde, Bury, Lancashire, on April 10, aged 57.
- PERFECT, T. W. C., Esq., at Hammersmith, on April 13, aged 87.
- SLATTER, E., Esq., late of Oxford-street, Abercromby-square, Liverpool, at Bare, near Lancaster, on April 6.
- TURNBULL, W., Esq., Surgeon, Madras Service, at Aldroughy, on April 9.
- WALLACE, R., Esq., at Eglinton-street, Glasgow, on April 9.

BOOKS, ETC., RECEIVED.

"The Principles and Methods of Medical Observation and Research." By Thomas Laycock, M.D. Second Edition.

"On Diseases of the Throat and Windpipe." By G. D. Gibb, M.D. Second Edition.

"A Manual of Diet and Regimen." By H. Dobell, M.D.

"The Treatment of Hoarseness and Loss of Voice by the Application of Galvanism to the Vocal Cords." By Morell Mackenzie, M.D.

"On the Advantages derivable to the Medical Profession and the Public from the establishment of Village Hospitals." By Albert Napper, M.R.C.S.

"Introductory Address delivered at St. Mary's Hospital Medical School, October 1, 1863." By W. O. Markham, M.D.

"The Social Science Review," for April.

"The Pharmaceutical Journal," for April.

"The Journal of Mental Science" (Quarterly), for April.

"Archives of Medicine" (Quarterly). Edited by L. S. Beale, M.B.—No. XIV.

1. Observations upon the Essential Changes occurring in Inflammation. 2. Observations upon the Nature of the Red Blood-Corpuscles. By L. S. Beale, M.B.

1. Report on the Dress of the City Police Force. 2. Report on the Probable Duration of Life of the Men in the City Police Force. By G. Borlase Childs, F.R.C.S.

"The Seven Sources of Health." By William Strange, M.D.

"On the Nature, Treatment, and Pathology of Puerperal Convulsions," By Richard Hodges, M.D.

"An Essay on the Mechanism of Parturition." By William Leishman, M.D.

"Fifth Annual Report of the Sussex County Lunatic Asylum, for the year 1863."

"On the Practice of Employing Certain Substitutes for the Genuine Ingredients in some Articles of Daily Food: Considered as it Affects the Health of the Community." By a Lady.

"A Vindication of the Present State of Aural Surgery." By a Member of the New Sydenham Society.

Coxeter's "Catalogue of Surgical Instruments and Apparatus."

"The Nature of So-Called Parasites of the Skin." By W. T. Fox, M.D.

"Ulverston and Its Neighbourhood:" a Hand-Book for Tourists.

Weiss's "Illustrated Catalogue of Surgical Instruments and Apparatus."

A Portrait of the Earl of Zetland (Engraving).

* * We have the pleasure to announce that in our next number we shall commence (to be continued in succeeding numbers) a series of Papers, in the form of Essays and Reviews, on Affections of the Nervous System, including their Pathology and Treatment, by William Camps, M.D., M.R.C.P., &c.

Dr. Cockle's very interesting communication on a Case of Thrombosis of the Femoral Vessels, with Remarks upon that affection (illustrated by a whole page coloured engraving), will appear in the June number of the "MEDICAL MIRROR."

THE MEDICAL MIRROR.

JUNE, 1864.

ORIGINAL COMMUNICATIONS.

On Spontaneous Gangrene connected with Disease of the Heart and Great Vessels. By JOHN COCKLE, M.D., Physician to the Royal Free Hospital.

WHETHER or not the innermost coat of an artery can become the actual seat of acute inflammation is still, perhaps, one of the vexed questions of pathology; at all events the anatomical appearances adduced in evidence of such lesion, by the earlier observers, are now generally admitted to be insufficient. Juster views respecting the conditions under which the blood may clot, at times, within the living vessel, and a more correct insight into the nature of the blood staining of the arterial walls, have materially weakened the force of a part of this evidence. And, as regards the remainder (even omitting the teaching of histological science which denies to the inner coat of an artery the attributes of a serous membrane), modern experimental physiology and pathological investigation alike concur in testifying that an *exudation* of pure coagulable lymph from the surface of the lining membrane of an artery in sufficient quantity to occlude the vessel, and, as a crowning result, to cause the mortification of the parts cut off from a supply of blood is, to say the least, a most exceptional result. The undeniable fact of the sudden occurrence of spontaneous gangrene of the upper or lower extremities in certain disorders of the circulation must, then, be accounted for otherwise than on the assumption of an acute arteritis.

The great masters of cardiac pathology of bygone times, while they often wondered at, were nevertheless, perfectly familiar with this form of gangrene. Increasing knowledge has enabled us to overcome difficulties which perplexed minds like those of Vesalius, Boerhaave, Van Swieten, Portal,

Corvisart. To Vesalius, this sudden supervention of gangrene in diseases of the heart, must have several times, occurred, for he pointedly writes:—" * * * Nisi illi ægrotantes ad memoriam tibi vocandi sint, qui in sinistro cordis ventriculo miram glandulosæ carnis molem, alios que quosdam affectus diu gesserunt, et ex crurum alternis que alicujus partis gangræna, &c., mortui sunt, prius quam de aliquo tristi in corde sensu, dolore que conquererentur." Portal, also, was perfectly cognizant of this form of gangrene, and, had not his prejudice with regard to the formation of polypoid concretions during life, influenced his judgment, he might possibly have divined the determining cause. His observations, though made in a doubting spirit, tend in such direction. Treating of polypi formed in the heart, he observes:—"Cependant si les polypes ont des branches en général, et s'ils sont attachés aux parois du cœur, il arrive quelque fois qu'ils sont flottans, et leur surface est fort unie; il paroît donc que de tels polypes, s'ils se formoient dans les corps vivants, pourraient très souvent changer de place, boucher les grands artères, s'opposer à l'entrée du sang dans les ventricules, produisent enfin dans son cours divers changemens et par conséquent, deranger le poulx." *Traité des mal. du cœur*, chap. vi.

Portal, furthermore, actually cites a remarkable case from the *Ephemerides*, in which a polypoid growth attached to the left ventricle, was considered to act as an intermitting plug to the aortic mouth, causing from time to time, complete absence of the pulse.*

Whenever spontaneous gangrene occurs in affections of the heart or great vessels, it is now almost universally admitted to be produced by arterial obliteration. For, so rare a result as gangrene, in diseases so common as those of the heart, satisfactorily proves that it cannot be dependent, as was formerly supposed, upon any condition of the heart, *per se*.

The causes obstructing the circulation through the larger

* A fibrinous concretion, attached by a slender band, but freely mobile in the chamber, may, from its size, cause almost instantaneous death by suddenly and completely plugging the left auriculo-ventricular orifice. Such cases, indeed, are not extremely rare. One interesting example occurred under my own observation. The anatomical preparation with a short abstract of the case, was presented to Dr. Richardson, who was, at the time, interested in these matters. He has figured and described this case in his work on "Fibrinous Deposits in the Heart." A concretion of sufficient size to clear the aorta to its bifurcation may even there be broken up, and passing the outer iliacs plug, more or less completely, the femoral arteries. Such a result, probably, occurred in a case presently to be detailed.

arteries to a sufficient extent to produce gangrene, may be either of extra or intra-vascular origin. A tumour, for example, may, by pressure, close the canal of an artery at a point sufficiently high to prevent the establishment of an adequate collateral circulation. Perhaps, one of the best marked cases of gangrene thus produced is that recorded by *Fabricius Hildanus*.* “A man of healthy appearance, and in the very prime of life was seized, without preceding indisposition, or any obvious cause, with gangrene of the legs and feet. This condition was accompanied by an insufferable sense of cold and heaviness, limited to the parts affected. Death speedily followed the supervention of the gangrene. On examining the body, a large schirrous tumour was found pressing upon the aorta, and cava at their bifurcation, and completely obstructing the circulation.” Hildanus declares to have met with many similar cases, but, studious of brevity, he omits their detail. Other cases have been, much more recently, placed on record.

Among the intravascular causes may be enumerated, first, the coagulation of the blood over a considerable tract (the general obliterating coagulum of Virchow), in consequence of some specific and often unknown change both in the blood and tissues with which it is in contact. A far more common cause consists in disease of a given portion of an artery, external injury physical or chemical, implicating the outer coats, atheromatous or calcareous deposit, corrugation of the lining membrane lessening the normal area, and causing a slackening of the circulating blood, may induce the formation of a primary or autochthonic clot. The last cause of arterial obliteration, and one which has for some years past attracted great attention, is impaction from fibrinous deposits primarily formed, either in the large veins, in the aorta or upon its valves, or in the chambers of the heart. These deposits, when dislodged from their original abode, are forced onwards by the current until becoming firmly wedged in the narrowing channel of some near or distant artery they more or less completely bar its further flow.

For a systematic development of the doctrine of embolism we are, as is well known, greatly indebted to the labours of *Virchow*. This indefatigable pathologist, in the opening volume of his *Archives*, has illustrated well the various forms of the affection, and has, moreover, in his later *Handbook of Pathology*, given a rich, though not exhaustive bibliography of the subject. But while successfully combating the views of Peter Frank and Dypuytren respecting

* De Sphacelo et Gangrenâ.

the existence of acute arteritis, as the cause of arterial obstruction and spontaneous gangrene, Virchow has scarcely done justice to the great clinical observer of Vienna, who was fully aware of the fact that an artery might be mechanically obstructed by a portion of detached and migratory coagulum. "Majora sunt ex polypi recessu ex loco, quo sanguinis fluxum haud prorsus impedivit in alterum, pericula, ac mortem subitanam induxisse ille visus est."*

When we reflect on words like these, and on the speculations of Portal and others respecting the plugging, by polypi, of the great arteries, it seems extraordinary that this cause of spontaneous gangrene in diseases of the heart was not seen in earlier times, considering, moreover, how numerous were the cases, how illustrious the observers, and how great the strife at the end of the 17th century concerning the famous question, "Utrum polypus cordis in homine vivente locum habeat aut mortis sit productum?"

(To be continued.)

A Note on Eczema in reference to Treatment. By TILBURY FOX, M.D., London, Physician to St. John's Hospital for Diseases of the Skin; Physician to the Farringdon General Dispensary.

THE present state of Dermatology in England is forced upon us daily, as a great anxiety; nor can one help feeling that some peculiar effort is needed to place upon a wider and more definite basis one of the weakest points of British science. There are diseases of the skin of the most common kind in abundance, whose study would repay the persevering observer, to whom, however, no opportunity is given for careful inquiry. This is to be regretted the more, because just now we are in a transition state as regards the leading features in the nomenclature, the classification and the definition of skin diseases, without any *clinique* where men are to be found, devoting their whole time to special study, no court of appeal as it were, to solve the veriest elementary difficulty. No wonder then that we are, as might have been expected, sadly behindhand *quoad* skin pathology, compared with our continental brethren.

The very mention of eczema, the most common disease of the skin, shows at once our exact position, for we are not

* Lib. v. Pars. ii, p. 78. De profluviis.

agreed as to its nature, its varieties, its relations, or even its treatment. I select eczema for the subject of a few remarks because of its frequency and our familiarity with its name, to show, in some degree, the line of observation which we should take, and the principles that should guide us in determining treatment. At the outset, of course, we must satisfy ourselves in regard to the essence; we must form, at any rate, some general idea of the disease. We are told that eczema is characterized by the eruption of very small approximated and aggregated vesicles (accompanied by superficial redness of the skin), which burst, and give exit to a serous or sero-purulent fluid, which stains the linen, and concretes in crusts, more or less thick and extensive. Now, then, is the disease local or general? We are told by some that local irritants will inevitably *produce* eczema. Unquestionably they will *evoke*, but query *produce* it. Our random observation often requires a smart rebuke. Count up the number of instances in which true eczema follows the action of local irritants, and *vice versâ*, and we shall assuredly have a preponderating amount of negation, and, in addition, we shall notice that in the positive case there is only a temporary disease, and recognize at once, by mere contrast, that in true eczema there is something over and above the locally produced disease which disposes to the perpetuation of the local change or eczema. Nay, eczema is in no sense local, though it may be called forth by local agencies, acting upon a predisposed habit. There is a special and peculiar state of nutrition which, for convenience sake, we may call eczematous, evidenced in well marked examples by the presence of a *peculiar* secretion drying into characteristic crusts, and the type of its eruption is vesicular (often an ephemeral state). Nor is it only on the cutaneous surface that its effects are noticed, but also the internal parts, especially the mucous membranes. There can be no questioning the fact that we may have a leucorrhœal, a blennorrhagial, a nasal "catarrh," traceable to the same causation and habit as that of eczema; an *a priori* consideration, which we find to be fact, when brought to the test of clinical observation, is very important. The eczematous state, so far as the local manifestation is concerned, may vary in the degree of its development. It may only arrive at the stage of erythema, or run on to the formation of vesicles, which may be ephemeral, persistent, or become pustular. In many of these instances the integument may be infiltrated, and cracked, *fissured*, as it is termed; hence, according to the *degree of development* and the *secondary changes*, result several modifications which look like separate species, and accordingly by the general consonance of authority, an erythematous, a vesi-

cular, a papular, a pustular, and a fissured eczema may exist. This doctrine, which has foreshadowed itself for some time, has been especially detailed by Dr. McCaul Anderson. Nothing is more likely to happen in this present case, however, than the confusion of dissimilar diseases, the mistaking concomitants for identities; for example, eczema lichenoides is a mixed disease made up of eczema and lichen. The typical form is indisputably and distinctly vesicular in eczema eruption, but this may be modified by accidentals. Gibert wrote that "it has been said that the papular, vesicular, and pustular forms, admitted as the basis of a classification of cutaneous diseases into separate and distinct orders, were incorrectly regarded as constant, and that a vesicle is frequently transformed into a bulla, a mere redness into a papule or pustule, so that the distinction founded upon these considerations were arbitrary and illusory." He then, after giving examples, adds: "But what do these examples, which we might easily multiply, prove? Nothing; except that there is nothing absolute in nature, and particularly in morbid nature. It suffices that these elementary forms, which serve to guide us in diagnosis, should be plain, and decided, and constant, in order that we may be able to recognize them in an immense majority of cases, and arrive by their means at a correct determination of the species. Now, eczema may follow, or antecede prurigo, or lichen; hence we have pruriginous and lichenous eczemas, which have been placed together under the term *eczema papulatum*. This appears to be very incorrect. The so-called eczema papulatum is a mixed form of disease. Why eczema is, of all skin diseases, that most prone to complications. The type of eczema is a vesicle; but eczema may be abortive, quoad the vesicles; or the latter may be ephemeral, or they may become pustular; but in all these examples the essence of the disease is present. It is the tendency to the formation of vesicles, and the effusion of a fluid *sui generis*, drying into crusts of characteristic aspect. At present, then, we seem justified in recognizing an erythematous, a vesicular, a pustular, and a fissured *phase* of eczema. The typical eruption is vesicular, but this may be modified so as to produce the varieties just named, by *abortive development*, by *secondary changes*, and by *the occurrence of concomitant disease*. We ought to leave the superficial view of eczema, which has so great a charm with many, and attempt the solution of the two following points of especial interest and temptation:—

1. What is the exact state of nutrition of which the peculiar discharge of eczema is the index?

2. What is the relation of the modified aspects to the

typical form of eczema? Are they concomitances (mixed forms) or different degrees of one and the same thing?

The above are important considerations in determining the treatment. The relative value of general and local remedies is thereby solved in great measure. Some trust to local means alone, some to general remedies. Referring to idiopathic and non-complicated eczema, in the first instance, we must remember that it has three distinct stages as regards treatment, and that it is absolutely necessary, in a scientific and indeed practical sense, to recognize these, viz.: the 1st, *inflammatory*; 2nd, the secretory or *moist*; and, 3rdly, the scaly or *dry* stage. In all cases we must, as preliminary, examine well into our patient's history, to ascertain the existence of any peculiar diathesis. Bazin has shown us example in making his division into scrofulous, arthritic, and herpetic, an arrangement of much value, scarcely based, however, so much upon the physiognomy as the effect of the treatment of eczema. We may define pretty clearly in the young the scrofulous taint, and have in our mind's eye at once the use of iron and cod-liver oil. The herpetic class, by the negative evidence of scrofula, the rather dryer character of the eruption, and its more general diffusion, its recurrence and chronicity, in which arsenic is of great use. The arthritic is difficult to describe. It is met with in elderly people of gouty and rheumatic habit, and in such, alkalies and colchicum do good service. Such should be the *tendencies* of our general treatment, so to speak. In all cases we must remember that nutrition is below par. The diet must be well considered and unstimulating. As a rule, if the eruption be general, general treatment is demanded especially; if it be local, then local treatment will often do alone.

Locally, we must remove all sources of irritation, and see that every facility is given to the thorough application of our medicaments and the removal of crusts. If the disease be local it is not unlikely that the cause is rather local than general, which is true in idea, and often in fact, in the opposite case.

Stage 1.—*The Inflammatory. General Remedies.* Purgatives, salines, and laxatives, with especial attention to the action of the kidneys, if any diathesis is marked give its specifics if suitable. *Locally*, all that is needed consists of emollient applications, bran tea, poppy or oatmeal washes; by all means keep the parts well shielded from friction. *The object is to conduct the disease naturally through the first stage without interference or hindrance.* It is not sound therapeutic to attempt to "cut short" the early stage of an eczema.

A special annoyance (itching) is sometimes of great pro-

minence, it may take on the character of a burning sensation. To allay this, we may use simple lead lotion, camphor ointment, black wash, belladonna lotion, or cyanide of potassium ointment.

Stage 2.—*The Secretory or Moist* is to be treated, as regards general means, by the exhibition of purgatives, with the view of lessening the discharge, and locally, by the judicious use of astringents. Purgatives are only called for when any inflammatory symptoms are present, or the discharge is excessive and irritating. Iron, magnesia, and acid, or iron and aloes, are often useful; in the later stages, we may resort to our tonics. Locally we employ astringents; ointments are not required, indeed, are to be avoided at this stage. Liquid applications alone are admissible. When the vesicles rupture, and the discharge commences, solution of carbonate of soda g. x. ad ℥ij.,—borax g. x. ad ℥j., or glycerine ℥ij., oxide of zinc ℥ij., lime water ℥vi., are best adapted to the case. Our object should be to reduce the local heat, in so far as the local remedies are concerned, not to add any additional irritation.

Stage 3.—*The Dry or Scaly Stage.* This is reached oftentimes very quickly, especially in the localised cases, when local treatment is very effectual, and speedily called for. It is at the end of the second and in the third stage, that specific general remedies are called for, they are chiefly arsenic, arseniate of soda, and sulphur. Baths of various kinds are now especially useful, and ointments are called for. There can be no question, that when the disease has lasted a long time, it has a great tendency to become more and more localised, the general condition improves, but the local mischief is perpetuated by the loss of vitality which the skin undergoes, so that in old standing examples, eczema, for all practical purposes, may be looked upon as a local disease. Our treatment then, locally, depends upon the age and extent of eruption, and the degree of infiltration.

In mild and recent cases, absorbents will alone be required, such as the milder mercurial ointments, simple iodine ointment, and the like; Hardy prefers calomel ointment. Stimulants they may be called, if this name be preferred, but it is not so much a *stimulative* as an *alterative* effect that is required. In chronic examples, where the infiltration is marked, and the disease appears like psoriasis, we are compelled to set up some derivant or revulsive action; oil of cade, consisting of equal parts of tar, spirit, and soft soap, or blistering, may be desirable. In many cases, a strong ethereal solution of nitrate of silver is very efficient, in the form of two scruples of the silver to an ounce of spirit of nitric ether. In

the medium class of cases, the compound sulphur ointment of the Skin Hospital, tar, the nitric oxide, and nitrate of mercury ointments seem best adapted, by their stimulation, to promote cure.

In eczema we start with soothing agencies only, avoid irritation of all kind; when the acute stage has passed, we employ absorptives, and when the disease has become localised, so to speak, stimulation, and if this fail, revulsive remedies. The difficulty seems to be to ascertain the exact moment when we should give up the soothing, and have recourse to the stimulating system.

Fissuring is sometimes a troublesome condition, and we do not appreciate as we should, the efficacy of *maceration*. Immense good results from the continuous application of glycerine and oily fluids, and this does not forbid the employment of astringents and stimulants at the same time, such as zinc, borax, or tar. If we keep the dry, harsh, and fissured parts constantly moist and supple, and at the same time stimulate gently, we shall meet with ample success.

Eczema, *secondary* to other diseases, requires some different plan of treatment. If consecutive to scabies, treat the scabies, whatever the state be. Eczema once set up by scabies, may, however, be perpetuated, when every trace of scabies is removed. A soothing plan of remediation is called for; to treat this state as an ordinary eczema, would be a grave misappreciation of its nature. In pruriginous eczema, see well to the existence of pediculi, don't irritate the skin, improve the general health, and give gelatinous and alkaline baths.

When lichen is present, we should avoid too much local irritation, and use gelatinous and soda baths, mercurial ointments, sulphur, and general tonics. When the mixed forms are pretty well localised, viz., as in bakers, grocers, bricklayers, and washerwoman's itch, we may conclude that the cause, and therefore the treatment, must be in, a great degree, local, and in these cases we may use revulsive measures. All that is insisted upon here in this mere mention of the treatment, is this, that complications rather imply a greater change in the nutrition at large, a necessity for general treatment, and the avoidance of local irritation, ergo, the employment of emollients and astringents.

Essays and Reviews on Affections of the Nervous System, including their Pathology and Treatment. By WILLIAM CAMPS, M.D., Member of the Royal College of Physicians, London, etc.

INTRODUCTORY.

THERE can, I think, be no reasonable doubt in the mind of observant and intelligent practitioners of the medical art, that diseases, disorders, and derangements of the nervous system, have of late years greatly multiplied in number, if not in severity of degree. More than this, not only have they greatly multiplied, but perhaps it is not saying too much to assert, that, even at this present time, they are greatly upon the increase. From whatever cause or causes the increase in this class of diseases may arise, and it would not be a difficult task to point out some amongst others, as tending to produce them, the fact, as it appears to me, remains indisputable. Some physicians affirm that formerly human beings, men, women, and children, were generally stronger and more robust, and less frequently attacked with disease than they are at the present time; in fact, according to the opinion of such, there was a less amount of disease altogether amongst mankind at large.

However this may have been, whether true or not, the causes which tend to produce diseases of one or more parts of the nervous system have greatly increased, and it is much to be feared that this increase does but keep pace, *pari passu*, with the everyday increase of population and of progressive civilisation. Especially is this the case as regards residents in large towns and cities, in which the daily toils and burdensome anxieties of life make increasing demands upon the nervous energy and brain-power of all engaged in the struggle for life and position.

It would be beside our present purpose to stop here to discuss this important social problem now; we may possibly attempt this in a subsequent number, but must content ourselves for the present with remarking, that all ethnographical and geographical researches tend to establish the opinion, that diseases and disorders of the nervous system are more or less frequent in proportion to the greater or less increase of civilisation. The older physicians do not, in their records of diseases, treat at length of diseases of the nerves; in fact, paralysis and convulsions of more or fewer parts of the body would seem to be all, or nearly all, the diseases of this class that they recognised as such, although a careful and attentive perusal of their writings will show, that they had observed and recorded many diseases to which they affixed no names, and

to which they did not, or could not, assign appropriate causes; diseases which, at the present day, by the aid of a more enlightened physiology and pathology, we know to belong to the class of nervous diseases; the phenomena they present to our observation indicating most clearly to the intelligent practitioner, some lesion in the functions, if not in the organism, of the nervous structure of the human frame. In the course of intended papers prepared for publication in succeeding numbers of the "Medical Mirror," we propose to treat of affections of the nervous system attended with *impaired* or *perverted motion*; of affections of the nervous system attended with *impaired* or *perverted sensation*; and of affections of the nervous system, attended with *impaired* or *perverted intelligence*; and if fitting opportunity and suitable leisure should permit, we shall hope to advert to, and discuss, certain not commonly recognised forms of affections of the nervous system, attended with *impaired* or *perverted* functions of organic life. The order or method in which it is proposed to elucidate these various subjects does not appear to us to be of any very great significance; much in regard to this, will depend upon the mode of thought and arrangement in reference to cases which are now, or have been heretofore under treatment and observation. The chief object aimed at, and which we design to keep steadily in view, is to submit to the notice of the readers of this journal, whatever, up to the present time, is received as truth, in relation to the physiology, pathology, and treatment of the diseases under consideration; whatever may be reasonably dictated by an experience, now of some years' standing; and whatever may be considerably suggested by *à priori* reasoning, as probable to be of service in the remedial management of some of the most important and intractable disorders to which the human being is subjected.

When we come to speak of the higher functions of the nervous mass, or of those affections of the nervous system, attended with evidences of *impaired* and *perverted* intelligence, thought, perception, consciousness, volition, imagination, memory, and other so-called mental powers, it will be manifest that this domain of pathology is very widely extended, and will embrace a department of medical observation and reflection, not included in any other region of professional oversight and solicitude.

The ruder anatomy of the parts concerned in the class of disorders under consideration, may be stated at once, as simple, and far from complex; consisting on the one hand of the entire nervous mass of the human framework; and on the other hand, of the blood-vessels that supply, and, in many

cases, that accompany the nervous mass in its grosser parts, or in its numerous ramifications throughout the body. In cases, however, of *impaired* or *perverted* motion, as in paralysis, and in convulsions for example, there is another anatomical element that must be taken into account, and this element is one, that hitherto, in nervous diseases, has not received the attention that it obviously deserves, I mean by this, the muscular tissue, a tissue, the proper and healthy function of which is contraction or contractility.

By the nervous mass of the human framework will, of course, be understood, the brain, including the cerebrum and cerebellum, the medulla oblongata, the spinal cord, the nervous ganglia, situated in various parts of the body, as well as the ramifications of the various and numerous trunks connected with the cerebro-spinal axis, and the great sympathetic or nerve of organic life.

The minute anatomy, however, of their parts or organs, one of the most difficult achievements of laborious and pains-taking microscopists, will, of necessity, be referred to in the course of these papers, with a view to elucidate some of the disputed points in nervous pathology. This is not the appropriate time or place to mention by name, individually, the labourers in this department of anatomical science;—everything in its season—this will be done, when we avail ourselves of their several contributions to our existing stock of knowledge.

The application of anatomy to the nervous masses informs us of the intimate structure of the brain and nerves under their different forms, and, at the same time, makes us acquainted with their manner of distribution and arrangement, as ganglia, trunks, and branches, throughout the various parts of the body.

In the succeeding numbers of the “Medical Mirror,” we shall treat of affections of the nervous system, attended with *impaired* and *perverted* motion; and if time and space should admit of our doing so, we shall hope to discuss the disputed question of muscular contraction; and more especially as connected with diseases, accompanied with tonic and clonic spasms, as epilepsy, infantile convulsions, chorea, tetanus, and others.

The universally acknowledged importance of nervous affections, and the deep interest now felt in this extensive department of medical observation, as well as the active and refined inquiry devoted thereto, sufficiently warrant any amount of renewed attention to the subject, even supposing that little more than a renewed attention be asked and given to facts already known. The very intricacy itself,

affords one of those instances wherein new conclusions and a nearer approximation to truth may be rendered possible, we might even say probable, merely by recasting the order of these facts, regarding them from new points of view, and by using them in new or in different considerations.

In hospitals, and other kindred establishments for the reception and treatment of the sick, the student and practitioner commonly enough meet with affections of various parts or organs of the nervous system, yet, for the most part, those particular cases of this class of disorders which are there to be found, are by no means such as come under observation and treatment in the course of daily professional life; in this latter condition, that is in the great hospital of the world at large, many of these cases of affections of the nervous system, present themselves to our notice under most troublesome, and frequently under very unsatisfactory conditions; in fact they occasionally, and especially in very civilized life, are amongst the most intractable disorders that the practitioner can have to do with. We are often called to see diseases of this class, in ordinary practice, in which, by a careful and attentive examination of the patient, we may be convinced that we have to do with a morbidly physical condition of the body; whilst, at the same time, the exalted, exaggerated state of the imagination of the same patient, magnifies to himself or to herself, as the case may be, their sufferings, and the danger of their condition; the medical attendant, knowing all the while, that the disorder is as evidently a physical disorder, as an attack of jaundice or of dropsy in the same patient would be.

Fortunately, however, such disorders are rarely fatally dangerous, although exceedingly troublesome, and whilst they do not frequently shorten life, yet, nevertheless, they despoil it of its pleasures, and they cause much anxiety and annoyance to the sufferer, to their friends, and to all around them. By their influence on the moral nature of the patients, they are led to look at all objects that surround them from a wrong point of view, and fashioning their conduct accordingly; their behaviour is not unfrequently a mystery as well to themselves, as to their acquaintance; in fact, their whole being appears to have undergone an entire metamorphosis, a metamorphosis however, which is always unhappily to their discomfort and disadvantage. We shall have much more to say upon this subject in a future number of the journal, when treating of that proteiform malady—hysteria. For the present, we can but glance at a few of the leading topics of our subject. The discussion of the now exploded doctrine of the existence of animal spirits, and of the substitution for it, of an assumed

nervous force, nervous agency, or nervous energy, as influencing motion, sensation, and intelligence, will not inappropriately demand some notice as we proceed with the subjects under consideration.

Under the head of treatment of affections of the nervous system, we propose to discuss the opinions regarding the application of galvanism and electricity, as remedial agents in this class of disorders, discriminating as much as possible, those cases, wherein their use may be advantageously resorted to, and, on the other hand, those cases, in which their use should be altogether avoided. Other, and rarer therapeutic agents, must not be overlooked, such as the application of the actual cautery, the circular blister, and especially the application of heat and cold by various media.

The influence of the nervous system in the production and maintenance of animal heat; the close and intimate relation of the blood-vessels to the nervous masses, and to the nervous filaments; and of both these anatomical elements with the muscular tissue; the application of organic chemistry to the investigation of the ultimate constitution of the nervous tissue; these, and many other, not less important topics, we shall hope to bring under the notice of our readers as occasion may offer itself. In the next number of the "Medical Mirror," we propose to enter upon the consideration of hysteria, and the hysterical constitution or temperament.

On Indigestion in Early Phthisis. By E. SYMES THOMPSON, M.D., M.R.C.P., Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton; late Assistant-Physician to King's College Hospital.

DERANGED digestion is one of the most common deviations from health that ushers in tubercular disease. By some it is regarded as a part of the malady dependent on impure blood, by others, it is looked upon as but a casual complication, tending, like other disturbing circumstances which depress vitality, to the production of tubercle.

The derangements of the digestive system occurring in the later stages of consumption are, for the most part, dependent on organic visceral disease: those who in the early stages suffer most from dyspepsia, are subsequently prone to diarrhoea, the morbid condition extending downwards from the stomach to the bowel.

In fifty tabulated cases of undoubted consumption, the dyspeptic symptoms were found to have existed at the commencement of the illness in about half the cases. In a quar-

ter, it appeared to follow inflammation of the lungs or pleura. Cough was the first symptom noticed in about a quarter, and shortness of breath in about a twelfth or one-eighth of the cases. Hæmoptysis, though frequently an early symptom, was rarely *the first*.

The most common variety of indigestion, and that which is especially met with in *hereditary* phthisis, is marked by general feebleness of the digestive functions, traceable to a want of constitutional vigour. The food lies long undigested, producing a sensation of fulness, weight, and pain, and the epigastrium (or "chest," as it is called by the patient), with pain between the shoulder-blades, gastric juice is poured out, but it is too weak and watery to perform its function. Dr. Bennett regards acidity of stomach as invariably present in phthisis; this view would certainly account for the inability to digest fatty matters so usual in the disease; but many of those who have carefully investigated the subject, have failed to discover indications of marked increase in the acidity of the gastric juice.

There is another form of indigestion, usually characterised at the outset by frontal headache, not directly referable to any error in diet, which seems to be dependent on unhealthy blood; a poison analogous in its effects to that of gout or retained urea, seems gradually to accumulate in the system, and gives rise to periodic attacks, followed by relief and repose. The nausea and violent retching that occurs in these cases arise, as in sea-sickness, from a cerebral cause, and like the morning sickness often present in phthisis, affords no evidence of stomach disorder, but merely of reflex irritation of the Vagus nerve. The blood fails in supplying the proper secretions for healthy digestion; the tongue becomes furred, and there is no appetite; the food taken is either not absorbed or absorbed in a form unsuited for nutrition. This condition generally ceases on the establishment of tubercular disease, the morbid element being then eliminated from the blood into the lungs.

There are other cases, again, the converse of these, in which there is no evidence of disordered digestion until tubercle is deposited in the lungs and cough established. If now a fit of coughing occur soon after a meal, the contents of the stomach are rejected. The same thing occurs in brain irritation and during the passage of gall-stones or renal calculi, but in the first case the irritating cause is abiding, and the vomiting becomes more and more easily induced. This is especially the case in women, whose nervous systems are most susceptible, and the rejection of the contents of the organ is brought about by the presence of unsuitable food in

the stomach, by a slight mental shock or even by a rapid change of posture. Sometimes there is simply vomiting and dry retching, in other cases, the movement of the stomach leads to secretion from its coats, and some fluid is also ejected.

Not unfrequently, in consequence of this reflex irritation, the gastric juice is poured out without the intermediate condition of vomiting, and thus the digestive power is weakened by the removal of the fluid which should be devoted solely to digestive purposes, the food is then received by an exhausted organ, the juices of which are both deficient in quantity, and weak and inactive in the performance of their functions; the presence of undigested food then acts as a foreign body, irritates the stomach, and leads to superficial ulceration. The lung irritation, though the primary source of the diseased condition, may thus become of secondary importance, both in the eyes of the patient and the medical attendant.

Where phthisis originates as it often (according to Dr. Andrew Clark invariably) does in disorder of the lacteal and lymphatic systems, direct evidence of indigestion may be wanting, but the body wastes, and it is evident that there is a fault somewhere in the blood-supplying apparatus. Primary digestion may be unimpaired, but the process of assimilation and sanguification is interfered with. Emaciation may be rapid and progressive, although there is no evidence of lung disease. A microscopic examination of the blood may afford in such cases a readily available aid to diagnosis, and help to determine at what point in the circle the diseased action originates. If we find a paucity of red corpuscles and an excess of white ones, we may be pretty sure that the chyle-transforming force is imperfectly at work; that there is either a deficient supply of "raw material" or the machinery needs cleansing or partial renewal. An estimate of the proportionate number of white, as compared with red corpuscles, may help our prognosis as well as our treatment.

All the disturbances of the digestion to which allusion has been made interfere with nutrition, and must be lessened or removed before we can hope to make real progress in the treatment of the lung affection. In a large proportion of phthisical cases, the main object of treatment is to get the digestive system into perfect working order, and thus to restore the blood, and build up the tissues. To this end a *diet*, carefully and judiciously adapted to the requirements and capacities of the individual case, is the first essential.

In *acute* disease, the causes may be so sudden and powerful as to obscure all constitutional peculiarities, while in

chronic maladies the course and character of the disease is greatly influenced by the habit or constitution of the patient; so that in the latter, principles of treatment are more difficult to carry out, and require more attention to individual peculiarities, than in the former. Even in the matter of diet, it is impossible to say, with some authors, that beef-steak and porter is the best diet for phthisical patients; or with others, that nothing stronger or more stimulating than rice or asses' milk should be allowed. We must, on the one hand, avoid an over-stimulating diet which might lead to an increase of local mischief, and be careful, on the other, not to reduce the strength, and allow of further degeneration, by withholding food in the fear of exciting the system. While, as a general rule, it is undesirable to take food between meals; when the digestion is feeble, as in delicate consumptives, light nourishment must be given often, and heavy meals, which would only oppress the stomach and increase the evil, must be altogether avoided. The observations made by Dr. Edward Smith, in his Lettsomian Lectures, point strongly to this conclusion.

Dr. Smith showed that, after a full meal, the pulse rose often as much as 10 or 20 beats a minute; and that, when food was taken in small quantities throughout the day, and not concentrated into two or three meals, a far greater equality of pulse was maintained. We must not now enter into the question of the pulse in phthisis, or the importance of keeping it at a low and even standard—a subject we discussed before the Medical and Chirurgical Society three years ago, when the advantages of ozone as compared with digitalis and other sedatives were pointed out.

Where the stomach is weak we must not overcharge it. By diluting the food, its passage through the pylorus is hastened; and where the stomach itself is disordered and the intestines healthy, this is of course desirable; but many delicate and anæmic persons cannot digest slops so well as solid or semi-solid food.

Where the gastric ferment is deficient, starch should be avoided; and where the digestion in the small intestine is deranged, oil and fat must not be given, and animal food, which is longer retained and more completely digested in the stomach, should be preferred to vegetables.

Of stimulants I will here say thus much only. If food is better digested *with* than *without*, we must give them.

In the class of cases first referred to, in which the stomach partakes in the general want of power which characterises all the functions of the body, we must try to invigorate our patients by out-door exercise, careful attention to free venti-

lation, cold or tepid sponging and friction of the skin. But unless by these means we can get food taken and assimilated in fair quantities, we shall see no real improvement. Acidity of stomach, if it exist, is due, not, as has been supposed, to an excess of gastric juice, but to a deficiency in its solvent principle, the food lies long undigested, and by its presence leads to the outpouring of a fluid wanting in pepsine.

Nevertheless, we must not expect too much from the administration of pepsine in these cases, nor must we allow the patients to overload the stomach, under the impression that the pepsine will digest an unlimited quantity of food; the quality as well as the amount of food taken should be carefully regulated, or the stomach will be oppressed and the evil increased. Our patients will often fatten on what may seem almost a starvation diet, but rapidly waste if over fed.

When first brought into this country, pepsine was employed to convert nutriment into aliment before introduced into the stomach. This plan has, for obvious reasons, been discontinued. It might however be employed thus where the patient is fed by enemata, and where the *taste* of the digested aliment would be no objection to its use; the rectal blood-vessels are capable of very rapid absorption, but true digestion cannot be accomplished without the active principle of the gastric juice.

In convalescence, after lowering diseases, with the assistance of pepsine, patients may digest more nourishing food than could otherwise be attempted; its power of checking putrefaction makes it invaluable where decomposition of the contents of the stomach occurs, its efficacy is then increased by the addition of charcoal, or in cases where constipation, dependent on torpor of the intestinal muscles occurs, a small dose of strychnine gives tone and regulates the bowels.

An argument has been raised, on a theoretical basis, against the efficacy of pepsine. That 5 grains was able to dissolve only 20 grains of albumen, and that such a dose as this could not possibly be of material assistance in the digestion of an ordinary meal. If the action of pepsine were simply that of a solvent, this argument might be a valid one, but its action is allied to that of *ferments*, for it enables an acid liquid to dissolve albumen, and disposes the stomach juice to an activity which, without some extraneous fillip, it would not possess; it sets on foot those changes which are essential to the conversion of food, and which, when once commenced, the gastric juice is itself able to carry on. It is seldom desirable to prescribe pepsine until efforts directed to the restoration of the gastric secretion have proved unavailing, it will often do little or nothing when a mineral acid or oxide

of silver could do much, and it is better to aim at the restoration of the stomach to its healthy action than to supply from without what, at the best, will but imperfectly replace the normal secretion. When the red, glazy tongue, flushed face, quick pulse, and epigastric oppression afford evidence of a dry and abraded mucous membrane, much may be accomplished by a scrupulous dietary. Milk is perhaps the simplest food that can be given; if mixed with lime-water, it gives no trouble to the stomach, but passes uncoagulated through the pylorus. If the stomach is equal to solid food, a little nicely cooked meat, with aerated bread toasted, may be taken in the morning, when the organ is most vigorous, and all nauseating physic must be avoided, as well as violent exercise, anxiety, and cold, which retard digestion, while repose or gentle exercise, with warmth and cheerfulness, assist the process.

The influence of active occupation of the mind and body on the digestive functions is generally acknowledged, but in the treatment of consumption it is often disregarded. We must not be satisfied by the statements of the patient alone as to the quantity of food taken, for tubercular patients often say that their appetite is good, when the consumption of food, especially of animal food, is quite insufficient. Although a carefully adjusted dietary is frequently alone sufficient, some kind of medicine may be usually helpful, yet a routine treatment is especially to be deprecated in a malady where every case is a separate study, and calls, if not for a special plan of treatment, at least for special modifications.

If there is reason to believe that solid food is retained, and gives rise to the epigastric fulness and other symptoms mentioned, an emetic, which removes the offending cause, may prove the best and most rational treatment. It may generally be desirable to clear out the intestinal canal by a blue pill, followed next morning by a rhubarb draught. Sal volatile with a bitter, or a tonic given for two or three days, and then interrupted, may be a fit introduction for cod liver oil, which often improves the appetite by stimulating and giving exercise to the lymphatic glands and vessels.

When milk is imperfectly digested, we may, while giving alkalies in the interval between the meals to relieve heart-burn and acidity, advantageously prescribe nitro-hydrochloric acid or lactic acid, the latter in doses varying from 30 minims to 2 drachms, with the food; or rennet wine obtained from the calf's stomach. We might be disposed, on theoretical grounds, to prefer, when the power of digesting meat is feeble, pepsine obtained from the stomach of a carnivorous animal or of an omnivorous animal like ourselves—the pig,

for instance! It seems doubtful, however, from experiments made on artificial digestion, whether the pepsine obtained from different animals is really very different in character or digestive power.

In a series of experiments made a few months since, in reference to this question, the conclusions arrived at were almost identical with those published by Dr. Sieveking, in the "Medical Times and Gazette" (April 4, 1857). Rennet wine, obtained from the calf's stomach, possessed not only a greater power in coagulating milk, but also in digesting meat, than the pepsine prepared by Bordault, or in accordance with the process recommended by my late colleague, Dr. Beale.

The experiments referred to were made by ascertaining the loss of weight in a known quantity of albumen, when under the influence of a definite quantity of pepsine for a given time, and at the temperature of the blood. In the matter of temperature, great care is needed, as the activity of pepsine is destroyed at 120° F., a fact which indicates the great undesirableness of drinking very hot fluids. Tannic acid, acetate of lead, and other astringents, often unnecessarily given to check hæmoptysis, greatly diminish also the power of the digestive juices.

In the recurring or periodic form of phthisical dyspepsia, accompanied by frontal headache, very little can be accomplished by regulation of diet alone; one is often told in these cases "it makes no difference what I eat," each attack is due only in a minor degree to any sudden or accidental cause. It results from an influence that has been long undermining the system, disposing it to succumb to very slight causes of irritation. Hence, a plan of treatment must be steadily persevered in, before there can be a prospect of restoring health. When the blood is impure we cannot expect healthy digestive fluids, and our treatment must be directed to the improvement of the first, by the frequent use of eliminants and alterative remedies, before we can hope to secure a healthy digestion. It is well to begin with the Abernethian panacea, or calomel and colocynth may be substituted for blue pill and a Seidletz powder, or bisulphate of potash with rhubarb for the old "black draught." It is rarely necessary to repeat the mercurial at frequent intervals (as recommended on high authority). The same end may be generally attained by the persevering use of taraxacum with sarsaparilla, and occasional saline aperients. I have occasionally found great benefit from the long-continued use of iodide of potassium. In very many of these cases, sal ammoniac, with or without the tincture of the sesquichloride of iron (as suggested by the late

Dr. Theophilus Thompson) seems well calculated to obviate hepatic congestion, and correct the condition of blood which characterises such cases. In females it is usual to find amenorrhœa or scanty and irregular catamenia, the indications of treatment are then best fulfilled by the compound decoction of aloes with Griffiths' iron mixture. It is often most satisfactory to see the dyspeptic symptoms yield under such treatment, and those indicative of pulmonary phthisis pass away with them.

In the early stages of consumption, especially when occurring in middle life, there is often a most distressing depression, which cannot be accounted for by the extent of lung disease. There is a feeling of melancholia and general malaise, usually called "biliousness" and constipation; the skin is inactive, and the urine of low specific gravity. If now softening occur, with profuse expectoration and night-sweats, the relief to the feelings of the patient is immense, and undue hopefulness takes the place of the previous depression. The unnatural activity of the destructive processes gives rise to a sense of active vitality, whereas the torpor of all the secretions and excretions, with retention of urea, bile, &c., induced general heaviness and despondency of mind.

When we meet with the sluggish state described, it is most important, instead of waiting for the disease to take an active change, to anticipate such an occurrence by active treatment. This is the time when blue pill, salines, and the hydrochlorate of ammonia will prove useful. The hot-air bath, by eliminating retained materials from the blood, or the water cure, which in another way calls the full power of the skin into action, affords relief. Emetics lately highly vaunted by some practitioners, may do good by rousing the system, promoting the circulation, and cleaning the gastric mucous membrane. Aloes, in the form of pill, or compound decoction, is, perhaps, the best aperient. Milk and soda-water must take the place of wine, beer and coffee.

Yeast has been given with a view to check the malassimilation by which tubercular conditions affect the blood, and it seems to influence digestion favourably when the saccharine and farinaceous elements of the food are imperfectly disposed of. In farancular and carbuncular conditions it has obtained much reputation, and its influence in typhus fever and erysipelas has long been recognised.

Small doses of hydrocyanic acid, alone, or in combination with morphia, are very useful in rendering the coughing, retching, and vomiting less severe, and tranquillizing the nervous system, and where the gastric juice is constantly poured out and unduly acid, an alkali, as the carbonate of potash, or

soda, or liq. potassæ, may be added, and administered an hour before meals.* Bismuth, prepared chalk, or lime-water, are very reliable remedies, but where the cough is very trying and paroxysmal, the inhalation of a few drops of chloroform mixed with Eau-de-Cologne, is perhaps the most efficient remedy.

The bromide of ammonium is sometimes useful.

In acidity it is best altogether to avoid farinaceous food and fat, for acetic acid is produced from the sugar forming starch, and the acrid fatty acids from oily materials. A little meat is often better than slops or pappy food in atonic cases. Superfluous food, by oppressing the feeble stomach, is not only useless, but highly injurious.

Broths are not always more easy of digestion than meat, for the fluid is absorbed, and the nutritious portion is too soft and concentrated to excite the healthy action of the stomach. Where there is active fermentation in the stomach, and a splashing sensation experienced on coughing, or other movement, and sarcinæ are found in the ejecta, fluid food is especially to be avoided. This form of dyspepsia, however, is rarely met with in phthisis.

In the class of cases alluded to, in which primary digestion is not interfered with, but the blood is inadequately supplied from the lacteal and lymphatic systems, our main reliance must be placed on cod-liver oil, which, if it cannot be given alone, in an acid bitter mixture, or in an emulsion with liq. potassæ, must be endermically introduced, for, by combining with the albuminous constituents of the chyme, it feeds the blood with healthy chyle granules, stimulates the capillary system, and invigorates all the functions of the body. Mild chalybeates, steel wine, or the reduced iron of the British Pharmacopœia, may assist in building up the red corpuscles.

In concluding these observations on the indigestion of phthisis, we may observe that, with the increase of knowledge of animal chemistry, we can scarcely fail to make advances in treatment. While there is perhaps hardly a disorder that calls for more of the tact and judgment of the practitioner, there is none in which a familiarity with physiological chemistry is more important, and that man will be the most successful who, besides practical common sense, possesses accurate and comprehensive knowledge of the chemistry of digestion.

* At the Hospital for Consumption at Brompton, a mixture, consisting of carbonate of soda, prussic acid, and gentian. The "Mistura Gentianæ Alkalina" is very largely employed in these cases, and with the best results.

On Apnea from Chloroform, with new means of Prevention of Accidents. By CHARLES KIDD, M.D., M.R.C.S., Associate Member of the Surgical Society of Ireland; late Physician to the Metropolitan Dispensary, &c.

[Continued from page 270.]

IT remains to consider a little in detail what is this new interpretation of the phenomena of apnea, or cardiac syncope, and what this new means of prevention, the study is equally available in apparent deaths by drowning, suffocation under the débris of tumbled-down mines, asphyxia, so called, in coal-mines, lime-kilns, &c., as in that of the asphyxia, or apnea, of chloroform accidents. We are aided in this consideration of paralysis of the heart by the analogy of various clinical facts which bear, not indirectly, on the point, whether the pulse always sinks or changes under chloroform administration; what, in a word, is the exact nature of this stand-still of the respiration, which is blocking up, so to term it, the channels of the circulation.

How purge the obstructions which begin to stop
The very veins of life.

As the bard of Avon puts it. Indeed of late it has occurred to some observers, watching the effects of chloroform apnea, whether this form of apnea may not have been the immediate form of death in cases of sudden decease of various public men found dead in bed, in form of bad "night-mare" from indigestion following heavy suppers with pressure on the diaphragm, rather than the very mythical disease, "gout in the stomach," or the usual formula of coroners' inquests, heart-disease.

One does not wish, of course, here to make any mystery of chloroform administration or accidents; if reference is made so often to them, it is with a view that the young men of the profession especially, may as well go right on the subject as go wrong. Review writers and older men occasionally object that we do not furnish precise directions how to calculate and avoid danger as we might calculate an eclipse; that with much excellency of speech, and of wisdom, and enticing words, accidents still do occur. But something of this is due to the coldness with which the entire subject is reviewed by them, and received by even our magnates of the profession, and old errors venerated and re-copied from one to the other.

There is a certain but remote analogy between railway ac-

cidents and chloroform accidents; in making more perfect the time-tables, signals, breaks, &c., in one, life of passengers is made more safe, an amount not inconsiderable also of technical engineering traditions must be described before corrected; so is it as to chloroform; the more perfect the signals, time-tables, technical descriptions, and such like, the better; thousands of journeys take place without accident at all, but familiarity with the rule of things going safe, leads too often to a disregard of danger.

What surgery is now, since the all-eventful hegira of chloroform, to what it was one hundred years ago, before that period or happy date, may be conceived from the fact, that in the lives of several eminent men, of D'Alembert, of Boileau, of Montaigne, for instance, as well as those of many men in our own country, it is related in their biography as an ordinary occurrence, they all and each died of the cruel torture of unrelieved stone in the bladder, refusing to the last to undergo the agony of the surgeons with their knives for hours, and red-hot irons to stop bleeding. Even within one's own memory, for excision of the knee-joint, it was told us by Crampton he had to procure four strong men to hold one poor sickly girl down to a table for that operation, but his own nerve failed at such butchery! Is chloroform indeed nothing, that prevents all this, as one is tired of hearing it so estimated, as nothing in our London hospitals. Our grandmothers did without it, and so ought our wives and daughters, is the epigrammatic logic of one school: it is like the *elixer-vitæ*, a "nine-day's wonder," and no more is the teaching of another. The true discoverer of anæsthetics, says the "Saturday Review," is the only man in the profession that deserves a peerage, but the profession do not know his name till he is dead, a far greater man than Jenner, of vaccination celebrity, is a prophet unknown in this day, and this is true.

Operations now with chloroform are met by the patient with cheerful resignation, he evinces an improved *morale* (we have no exact English equivalent for this word). A knee-joint is not now grievously resected or taken off in agony, but, under chloroform, carefully probed and examined, and resected without pain. Lithotomy is a trivial, painless work of seconds by the stop-watch of hard "grinding" fashionable students. Glaucoma, once as unsolvable or unsolved a problem as the quadrature of the circle, is now, thanks to Graefe and chloroform, easily cured. No matter where we turn now in hospital, chloroform is to be found. Like the healing dittany of the *Ænead*, it not only prevents pain but aids the cure. Chloroform relaxes the inguinal canal, for instance, in strangulated hernia, and often aids the recovery

by rendering a cutting operation unnecessary. It helps the reduction and cure of old dislocations, or the cure of stricture. This vapour is a new atmosphere or world of comfort to the much-suffering mother in the pangs of labour, in spite of grandmother syllogisms. In the agony of scrofulous joints "while swelling," fractured bones, amputations, &c., foreign bodies in the eye, especially of shrieking and agonised children, in cataract (from absence of tension and less risk to the "vitreous"), chloroform is beyond price and directly beneficial, even if it did not, as it does, remove pain. So is it of chloroform in tetanus, epilepsy, convulsive diseases, the torture of gall-stones, &c. We may say, indeed, of the lithotomy or surgical patient now-a-days, his once agonised misery or little life (in hospital) "is rounded with a sleep." No doubt in the strong healthy adults danger sometimes arises, nay, we are taught that excess of emotion (fright) is equivalent to excess of sensation; that requires a larger dose of chloroform, which dose also takes in an irregular and dangerous manner. Yet some will have it there is little skill required in chloroform administration. But there is the same as to experience as that to prevent a railway accident. Some say vivisectional experiments on animals have made all clear; this is as wise as to say such experiments alone would teach us how to treat a pneumonia, or bad midwifery case, iritis, or ague. Experience in hospital has taught us that nervous patients will bear immense doses of brandy, and so of chloroform. Hospital experience alone teaches that some patients take it slowly, others quickly. One administrator can prevent vomiting, while in the hands of another, of less experience, a softened "vitreous" is lost by vomiting, chloroform given in a grand, showy manner; but the patient is blind. Or in a dentist's case, mayhap it is given too completely with silver-inhalers, or balloons, bleeding continues into the back of the throat, and the patient is suffocated. Again, young people require very little chloroform, and take it always well; hysteria or delirium-tremens patients the worst, requiring great caution. A rich, strong male adult, in perfect health, requiring chloroform for a sudden accident, from mere emotion, will sink sooner than a poor broken-down, emotionless hospital pauper, with scarcely a bit of life in him, whose system, as it were, becomes acclimatised to surgical proceedings, "secondary" amputation, and so forth. More chloroform is required on fields of battle, as seen at Solferino, in secondary than in primary operations. Some patients will do better with ether, some with a "mixture;" some midwifery patients may have chloroform together with a little ergot of rye, and so on. Experiments on animals throw no light on these or a half

hundred other little points as to the signs of impending danger in the administration, they are learned by experience in the hospital operating theatre alone. A fixed stare of patients indicates spasm with apnea, and possibly death. In such a case, Langenbeck saved the man's life by tracheotomy; there was obviously convulsion, one pupil widely dilated, the other contracted! In 20 per cent. of the cases, again, in urethra cases, dentistry, reduction of dislocations, the fatal accident must be looked on as independent of the chloroform.

One does not wish to excite unnecessary alarm as to the fatality of chloroform, rather the reverse; but quackery gains by our own coldness. I may be permitted here to say, I have never had a fatal case myself, though persons occasionally write to me to ask advice, beginning, quite as a matter of course, "As you have had so many mishaps in your practice yourself, &c." I have never had one, and remind them, that a man does not set out in quest of a railway smash himself in order to explain it; my object is rather that the profession, as already said, may as well go right as wrong in future accidents; that like Langenbeck here, they may recognize danger before it is too late, and that, with other agents, this one of electro-magnetism,³ when rightly applied, may take its proper place as a means of resuscitation. If committees of societies take up the subject, it is chiefly because of our coldness, and that sudden paralysis of the heart "cardiac syncope" (the only doctrine allowed by chief weekly journals or supported by them) is not true; even Snow, with an *arrière pensée*, that it was not either syncope or cardiac, attached the adjective to it, and we now know it is only a series of post-mortem phenomena, arising from the lungs, the lungs, in reality, being the part at fault, as they do not receive the blood as usual in this paralysis of the respiratory muscles; this gorging is well seen in experiments on animals; it is not paralysis of the heart, it is a *remora*, or back tide, partly from the efforts of the animal to resist, and in the human subject from efforts at resuscitation, such as rubbing the limbs towards the heart, &c.

SYNCOPE.—The nervous syncope, with sudden death, which attends loss of food or delirium tremens, or the tearing of tendons, or operations on the urethra, venesection, &c., faintness from emotional causes,—over 100 of which cases I have collected,—faintness from idiosyncrasy at seeing blood as met in some patients, are all different from what we would understand as "cardiac" syncope; thus a crushed finger will stop the heart, John Hunter relates a strange story of a certain number of soldiers who were about to be shot in India, but, for

some political object, one-half were spared; they were told to throw dice for their lives, the men to be shot remained calm, the men saved all fainted with emotion! A man may drop dead from passage of a catheter; several instances have been collected by me of young women dying suddenly from fright of supposed ghosts on the stage or in a churchyard. Bichât tells us of a patient that died suddenly while he was passing a seton. All these 100 deaths occurred before the discovery of chloroform.

This form of *simple* syncope is very different from what is termed apnea, or cardiac syncope; it is usually a coincidence, rather than a cause of death in chloroform accidents; it occurs in reduction of large dislocations by chloroform, and there possibly air gets into the veins; it requires a very steady eye to detect it. It may occur from much bleeding, &c.

APNEA.—Next, as to the interpretation of the phenomena in apnea, or in the majority of deaths by chloroform, there is reason to fear (as in the faulty generalisation of all deaths happening from the napkin, pneumonia only to be cured by the lancet, &c.) a “post hoc” has been raised to the higher position of a “propter hoc,” as I believe in this wise.

If, in 100 experiments with chloroform on dogs, rabbits, &c., poisoned on purpose, we almost invariably find (as we do) that the most marked, indeed only marked post-mortem appearance, is cardiac syncope, that is, this gorging of the right cavity of the heart with healthy blood, the lungs passive: if in post-mortem examinations of patients in hospitals that have succumbed to chloroform, we find the same thing, the statistical inference appeared to Snow very clear, *though it is an error*, that the deaths were from paralysis of the heart. So it is considered in nearly all our standard books on surgery, and electricity is still tried in the hospitals *to the heart!* in many cases, without any good effect whatever.

One is very desirous that the true manner of applying electricity to the phrenic nerve and respiratory muscles in deep anæsthesia with a magneto-electro current were better known, as in this form this agent is most effectual in restoring life; while, when applied to the heart directly, as is usual, it only extinguishes what life there is left in that organ, and coagulates this blood in the right cavities, in cases of apparent death from drowning, it is even more valuable, but a “terra incognita” to our “Humane Society.”

Reasoning, indeed, from a large experience of ten or a dozen years, watching chloroform administration in London hospitals; in more than ten thousand cases, the author believes that the heart is never attacked by this paralysis, which appears from a mere “post hoc” statistical induction from the

facts; the same induction could be made erroneously from deaths after the use of the napkin, and, therefore, on account of the napkin; or recoveries in morbus coxæ because of the red-hot iron, or of varicose veins from use of drops, &c., &c. More correct deeper study of "cardiac syncope," shows it to be only a secondary result of the lungs not receiving the blood; the real paralysis, so to call it, is in the respiratory muscles. Several analogies corroborate this view, as well as the well recognised fact of the heart being, *ultimum moriens*, always under chloroform. And as to the argument from analogy or hospital experience—

1st. It is against the analogy of the action of chloroform, which is so peculiarly confined to the symmetrical muscles of the voluntary kind with striped muscular fibre, and no other, that it should act at all on the heart.

2ndly. It is contrary also to all we know of the pulse and of the heart in thousands of patients, and patients every day deeply narcotised for long surgical operations by chloroform; for, in such cases, the action of the heart is singularly unchanged all through, the pulse almost always is increased in volume and strength, even so much so, that some good observers have given an opinion that chloroform, when it causes death, it is by over-stimulating the heart. This is not exactly true, however, though death occurs probably during a kind of tetanic tension of the muscles of the thorax.

3rdly. The uterus is an organ very like the heart, where chloroform has decidedly some peculiar or exceptional action as to its construction; but there is some reason to doubt, if even here, the new contractile tissue, so like that of the heart of the embryo, the muscular fibres of the uterus are directly acted on by chloroform, so much so, as reflex spinal action abrogated for the time being, while a much diminished force is offered by sphincter muscular fibres to the hand passed into a still contracting uterus.

4thly. Again, occasionally the pulse before chloroform is observed to be almost imperceptible, with heart equally feeble in action, but both improve in force as the narcotism of the chloroform shall have become more and more deep. This does not indicate that cardiac action is always depressed by chloroform, it looks rather as if the muscular power of the heart remained unimpaired.

5thly. Even in some cases of chloroform accident by simple syncope or heart stoppage, it is probable the chloroform was not so much a cause, as a coincidence, patients thus will constantly faint in dislocations from moving fibrous parts, or tearing those engaged about joints (this is pointed out by John Hunter), or they faint from touching the urethra, with a

sound as mentioned by Syme and Heurteloup; while Snow describes the pulse as always or usually increased in force and frequency by chloroform, especially in the early part of the inhalation; the very part or stage most dangerous, as we have since learned from numerous statistics, for in this early "excitement" stage of chloroform anæsthesia, the respiratory muscles become fixed; the patient not feeling the necessity to breathe, and so in a kind of reverie (when lungs are fixed); the right ventricle appears to contract strongly in vain, as the lungs do not receive the returning blood, a remora ensues into the right auricle. This side of the heart becomes three or four times its natural size, and we may have death; but the remedy consists less in exciting the heart (as formerly by galvanism under the old interpretation of cardiac "syncope"), but to excite the diaphragm and respiratory muscles, to relieve the cavities of the heart; in fine, these five reasons show clearly that the remedy which promises the best results, both from theory and actual experiments on a large number of the lower animals, on dozens on dozens of such creatures is *electricity through the respiratory muscles*, not to the heart as formerly. "FARADISATION" cures facial hemiplegia, and renews the vital activity of muscles, paralysed for a time by temporary clot in the brain; but the ordinary electric shock or fluid, it is to be feared, only aggravates the mischief, as the violent current is directed back along the nerve to the brain, rather than to the muscles. So much is this now recognised that we have "six current" induction or faradisation instruments, the current six times refined or removed from the common electric shock or fluid.

The ordinary induction magneto-electric battery is perhaps the best for such accidents by drowning, chloroform, &c., the chief object seems to be by an intermittent, but gentle current, passed through the phrenic nerve (where the omohyoid muscle in the neck lies at the outer edge of the sterno-mastoid, the wetted sponge of one pole applied here, and the other pole applied as a wetted sponge also anywhere about the floating ribs,) to excite respiration. Whatever is done in a drowning or chloroform accident must be done quickly, and in an instant, the face and neck and chest well exposed, fanned with a lady's fan with cold air, which excites in a wonderful manner the external respiratory nerves, when the usual hospital manipulations altogether fail.

There have been probably not far short of 200 fatal accidents from chloroform or ether in ten or twelve years. The deaths still continue, though not now registered, so that

the subject is in reality a very serious one. The "sensation" novelists, it is to be regretted, have now got hold of the fact, to add to their armoury of horrors.

The present case is important, as the only one of a like kind perhaps restored to life in the London hospitals under such conditions; the patient was a poor married woman, otherwise in fair health, admitted to hospital, who was placed on the operating-table for a plastic operation on the female organs (one of these thanks to anæsthetics so successfully performed of late). The operation, which need not be described, was nearly completed; there was very considerable hæmorrhage during its performance, but having watched the pulse all through the operation, one was alarmed at its stopping and then going on again. I soon found, though I did not give the chloroform, that respiration had also suddenly stopped, with all the well-known signs of apnea, or what others would term it asphyxia stoppage of breathing, not at all *embarrassed* respiration, as stated in surgical books. The woman was exactly in that state of suspended animation (all but dead), so difficult to describe in words without saying she was entirely dead.

Death had obviously set in. She appeared suddenly to be cold and white, her face like marble, or that of a corpse. The striking fact in the case was perhaps this: the woman lay as it were thus dead for some minutes, just as animals do when poisoned by chloroform. No pulse, no respiration of the remotest kind; experiment and theory suggest, if we can, in this emergency and alarm establish respiration, the *remora* or "stand still" of the circulation (as Mr. Paget terms it) will yield, and pulse return. The Marshall Hall and Silvester methods were persistently tried in the case, still no pulse, no breathing, no animation. Every one was dreadfully alarmed; the magneto-electric battery was sent for by me, and arranged or used as just directed. The almost instant effect, as if by magic, was what we wanted—a *deep sighing drawing in of the breath!* a little confusion, pardonable, but half comic, arose in the application of the battery at first, as I found I myself had become unexpectedly a kind of galvanometer, receiving all the shocks, till a German physician standing by happily caught the metallic handles with his coat tails (as non-conductors). Off and on alternately the handles were now applied about a dozen times a minute, so as to imitate the ordinary action of the diaphragm. At each application there was a deep moaning respiration.

Some quarter of an hour now had the patient thus remained, pulse less cold, without breathing, the little tide of life ebbing fast away; indeed she was pronounced irrecover-

ably dead; it was one of those curious and instructive scenes worth any of the impossible chloroform novel "sensation" scenes that one now reads in magazines; the last farewell beam of feeling possibly past away: life quite extinguished; the last dark hour of nothingness already had literally set in.

The last of danger of distress,
 * * * *
 With langour of the placid cheek,
 And that sad shrouded eye,
 Where cold obstruction's apathy—

(the engorging right auricle, &c.), appalled one gazing mourner at least, but still the electric poles were applied, about twelve times each minute, so as remotely to imitate the stimulus of ordinary nerve action in the diaphragm. I thought at the moment of the popular idea amongst brilliant operating surgeons, that the administration of chloroform is the merest trifle. I thought of the 200 cases of deaths recorded, so like this one. To the delight of operator and all around, a deep-sighing inspiration, and then to our utmost relief another was noticed at each break of the circle; no pulse, however, was yet perceptible, cardiac action, watched with intense eagerness; minutes on minutes passed, which felt as long as hours; the sighs lessened; there was a moan, at the pain of the electricity or pin stuck into the diaphragm (the writer's scarf pin, as no other at the moment was available), this is mentioned to show the quickness with which these cases must be saved, or left to die; there was soon a flicker of pulse perceptible, but not till the patient was carried back to bed was the pulse entirely re-established, and not till the end of two hours was the electricity discontinued. The poor woman had a faint recollection of a dream of a journey to a far distant land, by rivers, gardens, and golden sunsets. I have known such a patient, a class man from Oxford, to feel he was 10 years in paradise, sitting, and walking, and conversing in an ecstasy, with Homer and Virgil, while my unclassic friend, a dentist, near Hanover Square, was only ten minutes sluicing him with cold water to bring him round, but such is consciousness of which Coleridge spoke and Shelley dreamed, and Bichat is all wonderful, and Locke is so convincing. Such is an instance of all but fatal apnea (and we have now collected four other quite as remarkable cases). Such is consciousness, which we can at any moment remove, but which I am quite certain we never before had such effectual means of restoring when to all appearance irretrievably lost, as now by our more correct *rationale* of the cause of death, whether in cases of drowning, or chloro-

form, accident, or of the other forms of apnea already enumerated. A case of drowning indeed has been published, where perfect restoration to life proved these means, after twenty minutes' immersion, and where the first sign or dawn of life was not perceptible till after two hours' steady application of the magneto-electric apparatus.* It is worth being added, as showing that almost no one ought to be given up, that both these patients recovered perfectly, awaking to a new life, without the least recollection of all they had undergone in the rough dragging and manipulation of the resuscitation (Silvester) and other methods.

REVIEWS AND NOTICES OF BOOKS.

A System of Surgery. By JAMES MILLER, F.R.S.E., F.R.C.S.E., Surgeon in Ordinary to the Queen, for Scotland; Professor of Surgery in the University of Edinburgh, etc. Pp. 1387, 8vo. Edinburgh: Adam and Charles Black. 1864.

Outlines of Surgery: being an Epitome of the Lectures on the Principles and Practice of Surgery, delivered at St. Thomas's Hospital. By F. LE GROS CLARK, F.R.C.S., Surgeon to the Hospital, &c. Octavo, pp. 258. London: Churchill and Sons. 1863.

DISSIMILAR as these two books are in appearance, and in the object for which they are intended, they have one common point of resemblance, viz., general excellence.

Professor Miller's book is a new edition of his well-known work on Surgery; and, as it now stands, constitutes a complete treatise upon all points connected with this branch of practice. It contains much matter which has not appeared previously, and all that is retained has evidently been read through with care by the author, and improved by additions and emendations whenever they have seemed to be requisite.

There is nothing novel in the arrangement of the contents; but nearly every subject is comprehensively discussed,

* It may be mentioned that during the past month another most important life has been saved, the patient having been pronounced dead. The case not given, as the pathological illness of a great Italian general filled the journals to its exclusion: a most brilliant debate at the Royal Society, the speakers such men as Sharpe, Carpenter, Savory, Huxley, on points urged by Brown-Sequard, against popular views of the nervous system, the pons, cerebellum, spinal cord, as explained by chloroform, shared the same fate.

as will be readily believed when the abilities of the author for the production of such a work, and the space over which his remarks extend, are taken into consideration. It is, indeed, in connection with the size of the book that almost the only fault which can be fairly found with the work exists. Macaulay commenced one of his brilliant reviews (that of Nares's "Memoirs of Lord Burleigh") by giving a summary of the number of pages which the book contained, its weight, and other particulars showing its huge bulk. We do not wish to utter any disparaging remarks in reference to the "System of Surgery," which is really what it is professed to be; but we would strongly advise the publishers to consider the desirability of its division into two more portable volumes. At present, to hold the book for any length of time in one's hand when reading is a sheer impossibility, and decidedly unpleasant for even a few minutes, unless a man wishes to diversify the study of surgery with muscular gymnastic exercise, such as that which is involved in holding the book (between 4 and 5 lbs. in weight) in the hands, while the reader's eye follows the letter-press. There are several places at which the division into two volumes could be effected.

Starting, as is customary in surgical treatises, with the subject of inflammation, Professor Miller gives an excellent epitome of all that has been written, worthy of record, respecting it. After the usual anatomical and pathological descriptions of inflammation of various tissues, he passes in review the different methods employed in the treatment of the inflammatory process.

He especially cautions the practitioner against a resort to blood-letting, excepting in certain, and we may add very rare, cases; and the following remark, coming, as it does, from a surgeon who has seen both the depleting and the non-depleting systems of treatment in full vogue, is of much value:—"It is a very easy matter to take away blood, and thereby induce debility; while to undo that result is in most cases difficult, and may be impossible." P. 42. He is equally discriminating upon the employment of mercury medicinally, and he particularly points out that it is always desirable, where this remedy is made use of, to endeavour to produce the specific effect with the smallest relative quantity of the drug. We are glad to see that the author refers, although only very briefly, to the value of *veratrum viride* as an arterial sedative. It seldom fails to produce a specific action upon the circulation, when given in doses of 4 or 5 drops, and it is worthy of a trial in all cases where it is desirable to keep down the circulation; sometimes it has a tendency to

cause purging, but this effect may be avoided by commencing with small doses.

In writing of the treatment of ulcers and abscesses, Professor Miller points out the injurious nature of the too frequent application of dressings, and of too much zeal in cleansing the sore, in cases of ordinary healthy ulcers. Both of these operate seriously as drawbacks to the healing of the ulcer, by inducing increased inflammation, and consequent degeneration of tissues, while they cannot fail to cause much pain and discomfort to the patient; and, as they are very common faults with beginners in surgery, who fancy that they must do something whenever they examine a diseased part, the author's remarks on this head are of practical value. Again, he reminds the reader in this section, and in various other parts of the work, that ulcers and many other external affections are more or less dependent upon constitutional causes, and therefore that every effort should be made to bring the system into a healthy state, by the administration of alteratives, aperients, and tonics. The author speaks guardedly of the use of Chassaignac's drainage tubes in the treatment of large abscesses, and says that their introduction is not unfrequently productive of hurtful irritation.

The question of amputation in cases of mortification is one which has, at various times, excited considerable controversy, and is ably summed up by the author, whose conclusions are somewhat as follows. When the gangrene is acute and humid, dependent upon an external cause, such as severe compound fracture or a burn, and unconnected with a previously existing failure of the system, or organic change in the limb, we may amputate, if the general symptoms admit of it, during the progress of the affection, without waiting for the appearance of a line of demarcation. If, on the other hand, it is chronic and dry, and depends on internal causes only, or rather on internal than on external causes, and both general and local power are deficient, we ought to wait for the line of demarcation, and watch the progress of separation, in the mean time supporting the patient's strength by stimulants and tonics, and when the detachment has sufficiently advanced, we should interfere merely to facilitate its completion, and amputate at the line of separation. We should also wait for the appearance of the line of demarcation, if the gangrene is the result of one particular cause, such as cold, and as soon as it is fully formed, we may amputate either at that part or above, according to the special nature of the case.

The classification of tumours, according to their composition, into analogous or homœomorphous, when their struc-

ture resembles some normal structure, and heterologous or heteromorphous, when, as in melanosis, for example, they bear no similitude to the healthy tissues, being practically unserviceable to the surgeon, however useful it may be to the morbid anatomist, the author prefers the division into simple or non-malignant, and malignant tumours. Fatty tumours serve as illustrations of the former, and schirrhous of the latter class. Occupying an intermediate position between these two great classes, may be placed the recurrent tumours, which have been particularly described by Paget and some other writers. They usually present the characteristics of fibro-cellular or fibrous tumours; but occasionally they may be cartilaginous or glandular, or be of the nature of proliferous glandular cysts. They are generally softer and more elastic than simple tumours of the same class, and grow more rapidly, while after each reproduction of the affection, the new tumour is softer, and of more rapid growth (assumes a more malignant type, in fact) than its predecessor. The possibility of the degeneration of tumours, *i.e.*, their transition from the simple to the malignant type, is denied by some surgical authors; but Professor Miller, with good reason, as will be seen upon a perusal of the arguments and facts advanced by him, holds that such changes may occur.

The subject of cancer upon which, as upon many points connected with morbid growths, the author adopts the same views as Mr. Paget, is fully discussed. So also, are the diseases of the blood vessels, bones, joints, and other structures; but our limited space precludes us from entering into details concerning these points.

In speaking of the presence of entozoa in bones, Professor Miller observes, that "hydatids have not unfrequently formed in the cancellous texture of bone." The term "not unfrequently," would lead the reader into some error respecting this peculiar affection, which is really very rarely observed in the osseous system, according to modern authorities. In the most recent English work on this subject, "On Human Entozoa," by Dr. Abbotts Smith, we find it stated, upon the authority of Davaine, that only nineteen authenticated cases of hydatids developed in bones, have been recorded; of these, no fewer than six occurred in the tibia.

The author seems to speak loosely, if not inaccurately, at page 322, where he remarks, after describing rickets, that "to the rickety female, celibacy should be strictly enjoined, for, unfortunately, an 'aptitude for conception,' often exists, along with pelvic change, and other circumstances extremely hostile to parturition." We completely agree with the author, as to the enforcement of celibacy in the case of females in

whom the pelvis is greatly distorted by rickets; but we know of no authority for the statement, that such persons are more liable to impregnation than other women.

Aneurism occupies nearly forty pages. The author's comparison between pressure and ligature as methods of treating aneurism results in favour of the former plan, when the affection is situated externally, and more especially if the popliteal artery is the vessel which is diseased.

For the prevention of any ill results from the bite of a rabid animal, the author wisely recommends excision, as well as the application of caustic; the latter, as is well known, possesses a valuable property in neutralising the effects of a bite by a mad dog, or other animal, and appears to exercise some peculiar chemical action upon the virus, so as to diminish its power, but hydrophobia is such a fearful disease that it is advisable to use every means in our power to avert its invasion, and consequently we ought not to rest satisfied with the application of caustic alone, when a bite has been inflicted by a dog which is really the subject of rabies. The treatment of hydrophobia, after the patient is actually seized by it, is in an unsettled state. Perhaps the utmost degree of benefit may be expected from placing the patient under the effects of chloroform, by inhalation; and this method possesses at least one advantage, that of facilitating the administration of fluid nourishment or medicines by means of the stomach pump. Between the intervals of the chloroformisation ice may be given to the patient to suck, *ad libitum*, so as to relieve the distressing thirst.

Gun-shot wounds, fractures, dislocations, and other surgical injuries, together with operations, come in for a due share of attention.

While Professor Miller's book abounds with information derived from many years' practice and observation, he does not omit to still further enhance its value by quoting largely from many important surgical authorities; and in this respect he has brought the work up to the standard of the present day.

Although Mr. Le Gros Clark's little volume, consisting chiefly of notes from which his lectures have been delivered, is modestly put forward under the title of "Outlines of Surgery," it contains a very large amount of information upon surgical matters. The spirit in which the work has been designed is admirable, and the manner in which the author has carried out his design is not less so; and we know of no better book for the initiation of the student in surgical matters. As is stated in the preface to the work, it is offered to the student, in the hope that he may be encouraged

to fill in the details from actual observation, and thereby cultivate a habit of self-reliance, instead of depending too much on book-learning in his early studies.

As the book is intended more especially for students, the author avails himself of the opportunity to give them some general advice in the preface; and if this be taken by his junior readers as earnestly as it is given, and kindly expressed, they must benefit by it.

It is arranged into seven sections. The first of these consists of remarks upon health, disease, temperament, inflammation, and its consequences; the second treats of wounds; the third is devoted to a consideration of special diseases, such as syphilis and cancer; the fourth describes the abnormities, diseases, and injuries of the various tissues; the fifth gives an account of fractures and dislocations; the sixth includes all surgical operations; and in the seventh, which is written more fully than any of the others, the author furnishes concise information upon many points of great importance in surgery.

The worst part of the book is the index, which gives a very inadequate idea of the extensive scope of the "Outlines," and might be enlarged with advantage. This imperfection, however, can be readily remedied in the next edition, which must soon be wanted, if the demand for the work be at all commensurate with its merits.

On the Nature, Causes, Variety, and Treatment of Bodily Deformities: in a series of Lectures, delivered at the City Orthopædic Hospital in the year 1852 and subsequently. By E. J. CHANCE, F.R.C.S.E., Surgeon to the City Orthopædic Hospital, Senior Surgeon to the Metropolitan Free Hospital, etc. In two parts. Part I, pp. 304. London: Lemare. 1862.

THE work now before us, and which is but a portion of what we trust we may see as a comprehensive treatise, has for its basis the text of six lectures, given a few years ago by the author, at the City Orthopædic Hospital. In the preface he reminds us, that his qualifications for the task he has undertaken, combine those of a general and a special character; for he had great opportunities as a teacher of practical anatomy, and surgeon to a general hospital, for many years before he devoted himself more especially to the subject of orthopædic surgery. With this specialty, he has

had the means of becoming intimately acquainted, through his connection with the Society for Spinal Diseases, and the Royal, as well as the City Orthopædic, Hospital. As we further learn from the introduction, he does not disdain the title of Specialist, and with reason, when we consider that this title, at one time regarded as opprobrious, is now claimed by the first practitioners of the present day, as one of distinction. We know now, that the successful specialist must necessarily, in addition to and by means of superior acquirements as a general surgeon, be among the few qualified to give full effect to their special opportunities of gaining and imparting knowledge in any one department. Formerly, the profession would have scouted the idea, that the study of deformities might constitute a distinct department of science. These diseases, in fact, were in the hands of quacks, or, at any rate, of imperfectly educated men,—of men, however, possessing more knowledge, tact and skill, than the hospital surgeons, as far as related to this neglected branch, which was considered so entirely beneath the notice of the scientific surgeon, that the term of Spinal Doctor was used as a reproach.

From this period in medical history we have only just emerged. We have the author's testimony to the fact, that only a few years have elapsed since the man who had paid particular attention to diseases of deformity, was still looked down upon by the mass of the profession as a Spinal Doctor, and any connexion with a special institution for the treatment of these diseases was calculated to lower a surgeon in the estimation of his brethren. Now, however, matters are altered, and we apprehend that no person of education, medical or non-medical, would think of consulting, in a case of deformity, any one but an orthopædic specialist. How much of this change is due to the natural progress of enlightenment, how much to accident, it is impossible to say; but we believe that we owe much to the fact, that the improvement has come from abroad. Had not the practical treatment of deformities been taken up so zealously by those masters in the art, in Germany, Stromeyer and Dieffenbach, we doubt if the prejudice against the subject in our country, would have given way for a long time, and our medical literature would have been wanting in such books as that before us.

We must refer to the author's introductory remarks for an admirable summary of the Special Hospital question, so much discussed of late years, but we trust, now happily settled. He has exhibited the injustice and selfishness of the promoters of the famous Anti-Special Hospital Protest, and the character of the enlightened specialist of the present day, in their true

light. The reader will find, within the compass of a few pages, abundant material for amusement and reflection on this subject. Mr. Chance also gives here, a summary of the state of our knowledge of deformities from an early date to the time of the great German, Stromeyer, to whose science and skill we are indebted for the introduction of subcutaneous tenotomy. As in the case of most other valuable discoveries, the leading idea had indistinctly engaged the attention of many thinking men, including Thilenius, Scarpa, Dupuytren, Delpech, and others. It was reserved, however, as Mr. Chance conclusively shows, for Stromeyer to see the full scope of the principle, and to carry it extensively into practice as a branch of surgical art, and for Dr. Little to be the means of introducing the novelty into British practice.

We now come to the consideration of the lectures, as originally given by the author in 1852, but now corrected by his subsequent experience, enlarged by the addition of a great number of valuable notes, and illustrated by numerous representations of disease and deformity, as found in connection with human and comparative anatomy and physiology. Of these, by far the greater number have been drawn and engraved from nature by the author.

In the first lecture he shows the importance and chief characteristics of the skeleton, upon which directly depend the relative proportions of different parts of the body, as the contour does upon the muscles. From his definition of deformity, it follows, that, as a surgical disease, it consists in an imperfection of form or motion, or both, "arising from an alteration in, or an undue action upon, the skeleton." He makes, consequent upon this definition, four divisions of his subject: first, the different periods at which its causes begin to operate; second, the system acted upon by the cause; third, the nature of the deviation produced by that cause; fourth, the description of the exciting cause. This fourth division, the author has entered into very fully. In fact, we know of no work in which so much light is thrown upon the possible, probable, and ascertainable causes of deformities. These are subdivided into original and acquired deformities; errors may exist in the osseous or muscular systems, in the skin, fasciæ, or ligaments; the bones may be altered in number, structure or shape, or relative position; or without alteration, there may be simply impeded motion. All these forms of error are again noticed, as regards the varieties of each found in practice.

In the second, third, and fourth lectures, Mr. Chance considers fully the causes of congenital malformation, commencing with those which act upon the ovum. In this portion of his book, he brings forward many interesting details derived

from his researches in embryology, and human, comparative, and vegetable physiology. He enters fully into the subject of error in the *primary impulse of development*, a cause of deformity, first advanced by the author, whose explanation of its full import is both novel and deeply interesting, throwing light, as it does upon the comparatively great extent to which the foetus, even of the human being, is independent of the mother's resources; also of hereditary influence, and the relative effect of this cause as arising from the side of the father or of the mother.

On the subject of mental emotion, as said to affect the foetus, through the mother, Mr. Chance enters most fully, giving the arguments pro and con. The view he advocates, is against the existence of this, as a cause of deformity. It is still a vexed question in the profession, as well as beyond its pale, the affirmative seeming to be the view universally taken. Without saying that he has settled the question in the negative, for it is a difficult matter to root out long-established errors, we may affirm that his reasoning is so cogent, that the upholders of the contrary view are bound to adduce facts and arguments much more satisfactory than they have hitherto done, before we can subscribe to their views. With the author, we cannot believe that a fright, a passing thought which had been forgotten for months, could lop off two arms; or that the sight of a dwarfish woman with small arms, should cause the absence of both arms from the shoulder-joint. Besides, the after-remembered fright of the mother can be proved in most cases to have occurred subsequently to the origin of the morbid impression on, or deformity of the ovum, embryo, or foetus, and it seems proved, that when once development has commenced, the embryo is placed beyond the mental influence of the maternal parent. The fact of so many fearful cases of deformity appearing among the out-patients of an orthopædic hospital, and not causing monstrosities, through the imagination of pregnant women, is much in favour of the author's views. The facts and arguments bearing upon embryology, in this third chapter, are so important, that it would be well if they could be brought to the notice of every physiologist.

The writer next treats of the second cause of congenital deformity, *Arrest of Development*, as arising from some condition of mechanical interference, and here he discusses fully the question of Position in Utero as an alleged cause. This he disputes, and we recommend his arguments on this head to the notice of our readers. He denies that from a deficiency of liquor amnii, or any other cause, the walls of the uterus can ever exert such an unequal pressure upon any particular

portion of the foetus as to cause malformation. In point of fact the uterus during gestation is very distensible, as we may see every day, its walls following and displaying, with much accuracy, each movement of the foetus. After this comes the next cause, Disease in Utero, and this must be one which is frequently in operation, as the foetus is liable to so large a number of the diseases which affect the living.

The fifth and sixth lectures contain a detailed consideration of the exciting causes of *acquired* deformities, some of which act directly upon the skeleton, the most common being rachitis and scrofula, not by any means the same disease, but to be carefully distinguished. In both there is absorption; in rachitis, of the earthy particles, which causes the bones to become soft and yield under pressure; in scrofula, of both earthy and animal matter, to a certain extent, whereby the bones only become thinner. In rachitis they are short, from imperfect development, and often, after cessation of the disease, possess abnormal bulk; not so in scrofula. Rachitis has not the tuberculous deposit, the abscesses, mortification, and ulceration of the articular cartilages we so often find as the result of scrofulous disease of bones. The great difference, however, in the author's opinion is, that in rachitis the medulla ossium is converted by diseased action of the vessels of the medullary membrane or internal periosteum, into a sanguinolent and gelatinous fluid, while in scrofula the medulla is converted into true tuberculous matter. We here find some valuable tables, showing the relative frequency of the deformities in different parts of the body in rachitis. It is a curious fact, that the author has invariably found swelling of the epiphyses of the radius and ulna; hence he considers this change as characteristic of the disease. Moreover, he believes that it always takes its origin in uterine life. He next gives an account of the causes acting indirectly on the skeleton, the irregular and deficient action of muscles, and mechanical impediments to their use; the subject of relaxation of the fasciæ and ligaments, and that of normal muscular action, the last section being peculiarly interesting to the physiologist.

We have now said enough to explain the character and scope of the work. These lectures, originally intended to expound to students the anatomical and physiological principles on which the present system of orthopædic surgery is founded, have been so much enlarged, chiefly in the form of notes and additional illustrations, referring to the writings of others, as well as to the author's matured experience, that we have now presented to our notice a complete manual on the theoretical portion of the subject. A great number of im-

portant physiological problems are treated of at considerable length, and the researches of other writers, both at home and abroad, are fully and fairly brought under notice, so that the book cannot fail to interest the advanced student in physiology and general surgery, as well as the orthopœdic practitioner. We trust that we may not have long to wait for the second part of this work, which is intended to comprise all of the details connected with the treatment of bodily deformities.

The Principles and Methods of Medical Observation and Research, for the use of Advanced Students and Junior Practitioners.

By THOMAS LAYCOCK, M.D., F.R.S.E., etc., Professor of Medicine, and Lecturer on Medical Psychology and Mental Diseases, in the University of Edinburgh. Second edition. Pp. 403, 8vo. Edinburgh: Maclachlan and Stewart. 1864.

IN the agitation which has recently been raised, and is still going on, respecting medical education, Dr. Laycock's name has been freely and, in some instances, unfairly brought forward, in consequence of the statement made by Professor Syme, of Edinburgh, to the effect that his colleague, the author of the volume before us, recognised no less than eight hundred different fevers. This statement has since been shown to have been made in error, but as no public acknowledgment of his mistake has been given by Mr. Syme, it is only right that we should refer here to this matter. Those who are curious on this point, will find Dr. Laycock's nosological table of fevers in the present work.

Commencing his first lecture with the general principles of observation and inquiry, the author points out the nature of experience in medicine, and shows the numerous fallacies into which any one may be led, who depends upon theory, without the assistance of actual practical knowledge.

In the next lecture, the general method and objects of clinical study are demonstrated. The first step in clinical study should be, he observes, to select a well-marked typical case of some common disease, and to observe this down to the most minute phenomena, comparing them with the description to be found in books. The author hits here one of the chief blots in medical education as followed in hospitals. The tendency of hospital practice is to bring under the notice of students cases of rare disease, rather than of the affections which form the bulk of a man's practice after he has left the hospital; and, from the undue value which is attached to extraordinary cases, it not unfrequently happens that when a

student settles down to practice, he is puzzled by simple forms of disease. This deficiency in teaching can only be overcome by proper clinical study, such as is involved in a course like that delivered by the Edinburgh professor of medicine. Clinical teaching is advantageous in every respect. The sick poor obtain most valuable attention from the physician; the public are benefited by the improved stamp of medical practitioners trained by this system; and the student himself is helped, step by step, to the acquisition of solid knowledge of his profession, which he will find of the utmost value to himself in after-life.

The third lecture details the methods to be pursued in the clinical examination of patients. A preliminary general inspection and examination of the patient is followed by an inquiry into the history of the case, and a special explanation of the functional and structural changes of the viscera; from the data thus obtained, we are enabled to arrive at final conclusions as to the nature, causes, and treatment of the disease. Certain constitutional morbid conditions, known as cachexia and diatheses, require to be considered, in the investigation of a case of disease, and the description of these appropriately completes the third lecture.

Having made a diagnosis, the next thing is to form a prognosis, and for the purpose of doing this correctly it is necessary that the order of succession of morbid phenomena should be fully understood. The author accordingly shows in the fourth lecture how the prognosis should be arrived at, and the extent to which different circumstances, such as critical periods, meteorological and seasonal changes, influence the prognosis.

The treatment, which is of course the principal object to be kept in view, can be now properly determined; and, as the case progresses, we are enabled to correct any incompleteness of the diagnosis made upon our first examination of the patient. The common sources of error in therapeutical observation, as instanced by Dr. Laycock, are so disheartening, that the beginner in medicine must want all the advice and comfort which the author gives for his reassurance. It may happen, for instance, as it doubtless too frequently does, that however careful the practitioner may have been in his selection of a remedy, his efforts are completely thwarted by the previous adulteration of the drug which he prescribes; or the medicine may have been altered through the ignorance, neglect, or carelessness of the dispenser; or, though it may have been duly supplied in its proper state by the dispenser, the nurse may ignorantly or carelessly omit to administer it, or the patient may not follow the directions

given by the medical attendant. These frequent sources of fallacy are difficult to cope with, and it is only by the exercise of diligent observation on the part of the practitioner that they can be detected, or prevented.

Some excellent remarks upon therapeutical observation, and the management of a case of illness, are contained in the fifth lecture; the sixth is upon the numerical method of research; the next treats of the analogical, philosophical, or purely inductive method of research; and the eighth lecture, on the naming and classification of diseases, is introductory to the second part of the work, in which the author gives the classifications of diseases.

These are divided into pyretic diseases (fevers), constitutional diseases, affections of the skin, diseases of the nervous system (neuroses), and mental diseases and defects (vesaniæ); these five principal classes being again subdivided into numerous small ones, according to the symptoms, seat, nature, and causes which give rise to various forms of disease.

The nosologies and indices (or as the author, whom it is a wonder to find tripping, writes indexes) of diseases contained in the second part, which is entirely new, will repay a careful study by the practitioner.

We can strongly recommend this book as one which embodies a very large amount of original research, while the clearness with which the author imparts much valuable information, renders it especially useful as a text-book for clinical teaching.

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1. *An Essay, Historical and Critical, on the Mechanism of Parturition.* By WILLIAM LEISHMAN, M.D., Physician to the University Lying-In Hospital, and to the Royal Infirmary, Glasgow, and Lecturer on Medical Jurisprudence, Anderson's University, Glasgow. Pp. 129, 8vo. London: Churchill. 1864.
 2. *On the Nature, Pathology, and Treatment of Puerperal Convulsions.* By RICHARD HODGES, M.D., F.R.C.S. Pp. 96, 8vo. London: Churchill. 1864.

AT first thoughts it might appear that the subject discussed in Dr. Leishman's monograph has already been incontrovertibly settled, but this is, unfortunately, not the case, for considerable uncertainty and inaccuracy still prevail respecting a most essential point in midwifery.

As the author observes, "Whoever takes the pains to study the mechanism of parturition in nature, will soon dis-

cover that too much is taken for granted, and that there is more yet to learn, while he will find that the labour brings its own reward, in lessening the tedium of obstetric practice;" and it is with a desire to further elucidate the "mechanism of parturition," taken in the most extended meaning of the term, that he has written the present work, in which he gives an able and interesting summary of the various opinions which have prevailed, both in ancient and modern times, together with his own views upon many disputed points.

The historical portion of the subject commences from the earliest period, and includes amongst those who contributed to the progress of the obstetric art, the names of Hippocrates, Celsus, Moschion, Ætius, in whose writings is found a mention of an instrument resembling the modern speculum, and of the use of the crotchet in facilitating labour, and Paulus Ægineta; next comes the Arabian school, of which the chief obstetric writer was Avicenna, to whom Dr. Leishman attributes the employment of the forceps, which had probably been invented before his time, as he gives no account of the instrument, although he describes its use. In the writings of another Arabian physician, Alsaharavius, who lived in the eleventh or twelfth century, two kinds of forceps are actually described.

From this period little progress was made in the art of midwifery, until after the discovery of printing, which led to a general diffusion of the knowledge of the writings of the ancients, throughout Europe; and the spirit of inquiry which was aroused soon led to practical results. Dr. Leishman passes in review all of the principal authors on midwifery from this epoch up to the present time. The extracts which he gives from the works of various authors prevent the historical details from becoming dry and uninteresting, and show very clearly the progress of midwifery from a crude state to the satisfactory position which it now occupies.

After having disposed of the question, in its historical aspect, to which about one-half of the treatise is devoted, Dr. Leishman enters upon a consideration of the cranial presentations. The diagnostic value of the situation of the ear at the symphysis, when the head presents in the first position, is particularly insisted on; although the author does not go so far as Dr. R. U. West, who says, in his essay on this subject, that on finding the right ear behind the symphysis pubis, indicating that the face is to the right, we may be sure that the head is decidedly oblique, and in the first cranial position. In reference to the rotation of the head as it descends to the floor of the pelvis, Dr. Leishman plainly shows the causes of this movement.

The position which the head occupies in escaping beneath the arch of the pubis, is often incompletely and unsatisfactorily described, and the author consequently considers this point at some length in the fourth chapter.

He is strongly opposed to the practice of supporting the perinæum during labour, and advances the opinion, that "the more assiduously the perinæum is supported in natural labour, the greater is its danger of rupture." There is much foundation for the arguments adduced by Dr. Leishman in favour of not supporting the perinæum, in which question his views coincide with those of Dr. Tyler Smith, and some other good practical authorities. One of the arguments which has been advanced in favour of manual support, is that the woman *expects* assistance, and, naturally enough, imagines that constant manipulation tends to hasten the termination of labour; as Dionis quaintly writes, in protesting against too much interference during labour: "*Il y a des femmes qui ne croiraient pas être bien secourues si l'accoucheur n'y avait toujours la main.*" This argument, however often it might have been adduced, is one which ought not to have any weight in a controversy upon practical midwifery; it is probable that the continuance of the practice of perineal support for many years is, in great measure, responsible for the desire which women themselves have for manual help, while it is certainly below the dignity of our profession to uphold any plan of practice upon such a ground as this.

The first vertical presentation is generally acknowledged to be the most common, but great diversity of opinion exists as to the one which is next in point of frequency. Naegele, Simpson, Bell, and Dubois, have all arrived at the conclusion, that the third cranial presentation is more common than any of the other, excepting the first; but the statistics of Murphy, Swayne, and R. U. West, give different results. Dr. Murphy considers the second and third positions to be equally frequent; Swayne makes out that the second position is much more common than the third; and the tables published by Dr. West give 31 per cent. of cases in which the head presented in the second position, and only 3 per cent. of cases in which the third cranial presentation was observed. Dr. Leishman is of opinion, judging from his own experience, that if an average were struck between the percentage yielded by the statistics of Murphy and Dubois respectively, we should get a near approximation to the truth. The proportion thus deduced would be as follows: First position, 67·04; second position, 9·52; third position, 20·92; fourth position, 2·52.

It was Dr. Leishman's intention, originally, to include in

his essay the mechanism of breech, face, and footling presentations; but, owing to the length of his observations on the ordinary cranial positions, he has determined to defer this portion of the subject for a time.

Dr. Hodges is already known as an author, upon diseases incidental to women, having written an essay on uterine hæmorrhage, for which he was awarded the Fothergilian gold medal in 1851.

There are few affections which are more formidable in their nature, or more distressing to witness, than that which he has selected for his present subject.

His chief object in writing this essay, is to record the success which has attended the treatment by early bleeding, in his practice; and he considers that this "is the chief remedy in this disease, not only from its relieving the brain, and preventing mischief there by lessening the pressure occasioned by the fullness of its vessels, but from its being likewise a marked sedative of spinal action."

Mental emotion, in some form or other, constitutes one of the most common causes of puerperal convulsions, and as a proof of the power which the mind possesses over the body, Dr. Hodges instances the curious historical fact, that the death of the Princess Charlotte, in 1817, from convulsions occurring after a tedious labour, dependent upon the arrest of the head of the foetus in a pelvis of less than the normal capacity, was followed by an unusual prevalence of puerperal convulsions, through the powerful influence of fear, on the minds of many women in their confinements. In some cases, the disorder may depend upon local causes, such as irritation of the alimentary canal by crude, indigestible food, or by intestinal worms, constipation of the bowels, distention of the bladder from retention of the urine, or any other cause capable of producing reflex sympathetic action upon the nervous system.

Dr. Hodges is of opinion that uterine action is not at all suspended during puerperal convulsions, and he gives details of two cases in which labour proceeded with almost unusual rapidity during the insensibility of the patient.

In the treatment of convulsions, the author mainly depends, as has already been stated, upon venesection, the blood being withdrawn not charily, but freely, and in a full stream. The quantity of blood to be abstracted, must depend entirely upon the nature of every individual case, and he does not, therefore, attempt to define the amount which should be removed; he observes, however, that in his own practice he has never had occasion to take away more than from eighteen to twenty ounces of blood at first, and then

from ten to twelve ounces at a greater or less interval subsequently.

He also places great reliance upon the application of cold water, or ice, to the spine; and administers some aperient, in order to procure copious action of the bowels, or if this cannot be given by the mouth, he recommends the use of an enema, either consisting simply of warm water, or containing a strong purgative, according to the requirements of the case. The hair should be cut short at the back part of the head; the state of the bladder should be ascertained, so that the catheter can be used if there be retention of urine; and the medical man should watch for complications as they arise.

The author's experience of chloroform is small, chiefly for the reason that he has found bleeding, and the application of cold so successful, that he has not had much occasion to resort to other remedies; but he believes that it would be valuable in cases where the convulsions were the result of excess of pain or excitement.

If the convulsions are very formidable, and continue unrelieved, he advocates the acceleration of labour by manual or instrumental interference, the more so as in some cases the distended uterus may be the chief cause of the convulsions.

In conclusion, we may state that Dr. Hodges' work is one which contains a lucid description of the disease upon which it treats, and that it is well worthy of perusal. Here and there, the author fails to express himself so accurately as he might do, but any shortcomings in this respect, are fully compensated for by the generally interesting nature of the contents of the book.

Annals of Military and Naval Surgery and Tropical Medicine and Hygiene, being an Annual Retrospect, embracing the experience of the Medical Officers of Her Majesty's Armies and Fleets, in all parts of the world. Vol. 1, for the year 1863. Pp. 376, 8vo. London: Churchill and Sons. 1864.

THIS is a most useful publication which is intended to take the form of a periodical review of the Army and Navy Health Reports, to analyse their contents, and to give, in an epitomised form, all the papers of importance, relating to sanitary matters and disease at the various stations, which have appeared during the year. The medical officers in both services will thus have in an abridged form, in one volume, what they would otherwise be without the means of obtaining

at all, or what it would be very difficult for them to procure, indeed almost impossible at the distant stations, viz., a collection of books, including the health reports issued by Government, and the various books published during the year on statistics and hygiene—a collection still more difficult to convey from one place to another. The civilian will also find here a great amount of information relating to the health, meteorology, &c., of the various army and navy stations in all parts of the world. We trust that the editor may meet with such encouragement as may induce him to carry out, with increased usefulness, the task he has undertaken.

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- 1.—*A Handbook of the Practice of Forensic Medicine.* By JOHANN LUDWIG CASPER, M.D., Professor of Forensic Medicine in the University of Berlin, &c. Vol. 3, translated by George William Balfour, M.D. Pp. 417, 8vo. London: 1864.
 - 2.—*On the Anomalies of Accommodation and Refraction of the Eye.* By F. C. DONDERS, M.D., Professor of Physiology and Ophthalmology in the University of Utrecht. Translated by William Daniel Moore, M.D., M.R.I.A., &c. Pp. 635, 8vo. London: 1864.

THE New Sydenham Society includes amongst its members so large a proportion of the medical profession in this country, that it will be unnecessary for us to notice, at any length, the two above-named works, which constitute the twenty-first and twenty-second volumes issued by this Society, and which have, doubtless, already found their way into the hands of many of our readers. Still as an increased accession of members will enable the Council of the New Sydenham Society to issue even more books than are now given annually for the moderate subscription, it would not be out of place to say a few words, by way of inducement to those who have not yet joined this monster book-club, which, during the five years of its existence, has issued upwards of twenty volumes.

The original Sydenham Society commenced operations in 1843, and the character of the books which were at first brought out under its auspices, such as the translations of Louis' "Researches on Phthisis," Dupuytren on "The Diseases and Injuries of Bones," and Simon's "Animal Chemistry," obtained for it considerable support; but, subsequently, when the Council committed the error of reproducing works by ancient authors, which, however curious in themselves and

ably translated, were not of general interest, the influence of the Society began to wane, and its dissolution having finally taken place, the present Society was formed.

The standard nature of the volumes issued by the New Sydenham Society, which has wisely almost entirely confined its operations to translations from foreign writers of modern celebrity, is too well recognised to need any eulogium from ourselves; and the two works before us are not inferior, in point of interest or value, to any of the publications of preceding years.

The name of Casper is known throughout Europe as that of one of the first modern authorities on medical jurisprudence, and his recent decease will long be felt as a great loss to that department of medical science. Laboriously devoting his time and abilities to the study of the particular branch to which he gave his special attention, the Berlin Professor accumulated a mass of information which is embodied in his Handbook of Forensic Medicine.

The contents of the third volume comprise various medico-legal matters connected with the Bio-thanatology of newborn children, investigations into causes of death, disputed sexual relations, such as rape, pregnancy, and similar medico-legal questions.

The task of translation has been skilfully and faithfully performed by Dr. Balfour. It is, perhaps, to be regretted that he has so literally followed the original, as there are certain parts of the third volume which might have been left out without any loss to the English reader. Those who have looked though it will readily understand to which part of the volume we refer; we need only observe that it is one of the just boasts of our country that the unnatural crimes which disgrace continental countries are seldom known here, and the minuteness with which Casper has entered into details of them are revolting to an English reader. Yet, even with this drawback, this translation of Casper's Handbook does infinite credit to the Council for their selection, and to Dr. Balfour, for his translation of so valuable a work, for issue amongst the members of the New Sydenham Society.

Professor Donders' treatise opens up a new field in optics. The anomalies of refraction of rays of light, including astigmatism, and the anomalies in the accommodation of the eye, by which is meant the power of bringing, at will, rays of different directions into union on the retina, are very important in their relation to vision, and have not hitherto received the full attention to which they are entitled. Professor Donders' work, in translating which Dr. Moore has successfully accomplished a difficult undertaking, is a

complete monograph upon all the diseases of the eye in which these anomalies are concerned. Its value to the ophthalmic surgeon can scarcely be estimated, while those professional readers who are not specialists will find in it much interesting information, which will more than repay them for the trouble involved in mastering its contents. We shall probably refer to this work at greater length on some future occasion.

1.—*Weiss's Catalogue of Surgical Instruments, Apparatus, and Appliances.* 1863.

2.—*Coxeter's Catalogue of Surgical Instruments and Apparatus.*

ANY one who takes up either of these books with the idea that it is simply a dull detail of surgical instruments will be agreeably disappointed, and will probably find that, instead of laying it aside in the course of a few minutes, as he might have anticipated, he will be induced, by the multiplicity of instruments named, and the numerous illustrations by which the description is facilitated, to look carefully through the whole book.

The kind of instrument which exactly suits one operator may be unfitted for another, in consequence of its shape, size, or some other circumstance connected with its make; and few, who have ever watched the anxious glances which our best operators cast, from time to time, in the direction of the surgical instruments arranged ready for an operation can doubt the high estimate which they place upon the use of their favourite modifications of the knives, or other instruments required.

It is therefore interesting, from a practical point of consideration, to be able to obtain a thorough knowledge of the modifications of the principal instruments in use. This can easily be done with the aid of either of the catalogues now laying before us, both of which are profusely illustrated with engravings, while the introduction of the names of the inventors, and of short explanatory comments when they are necessary make these works very useful, for purposes of reference.

EXTREME DISTRESS OF THE FAMILY OF A MEDICAL MAN.

WE have received the following donations on behalf of the lady and family, whose case was mentioned at page 246 of the "Medical Mirror":—

Dr. Townsend, Swindon, £1.

Edward Ilott, Esq., F.R.C.S., Bromley, 10s.

We have been requested to express the lady's warmest thanks for these donations and others which have been forwarded direct to the members of the Committee formed for the purpose of raising a fund for the support of the lady and her four little children; and we need scarcely add that we shall have great pleasure in receiving and forwarding to the Treasurer of the fund any sums of money which may be sent to us, at the publisher's, for the relief of this truly distressing case.

THE MONTH.

THE MEDICAL COUNCIL.

ONE of the most notable events of the past month, judged from a professional point of view, has been the annual meeting of the Medical Council, which has lately risen, after a twelve days' sitting, the expense of which is estimated at a cost of nearly £2,000. The results of the meeting have fallen very far short of the most reasonable expectation. Every subject, including the most important one of Medical Education, has been left in the same unsatisfactory position as it was in previously, and upon only one point do the Members of the Council appear to have arrived at any tangible result, viz., the admission of reporters to the Council's debates. The advantage of this step does not appear very evident, so far as the Council is concerned, for, on the principle that wherever there is mystery there must also be, at least, a certain amount of wisdom, the profession was accustomed to think that the Proceedings of the Council tended to some profitable end. As it is now, the pertinacity with which some of the members are determined to express their opinions upon every matter which is brought under notice, and the fact that all this talking ends in nothing, induce us to entertain a poor estimate of the Council's administrative abilities, and to briefly sum up their proceedings, in the language of Hamlet to Polonius—

“Words, words, words!”

Of all the reforms needed in the medical profession, that of the mode in which the business of the General Medical Council is conducted is the most imperative. Several of the speeches, especially those on Medical Education, show that

some of the members are earnest and zealous in their desire to advance the interests of the profession, if they were not rendered almost powerless by routine and prejudice.

THE EDINBURGH COLLEGE OF PHYSICIANS AND THE ARMY MEDICAL SERVICE.

The Edinburgh College has recently addressed a spirited memorial to Lord Palmerston, in which the grievances of the army surgeons are detailed, the causes of the present unsatisfactory state of the army medical service pointed out, and a remedy suggested. This memorial will, it is hoped, be followed up by similar remonstrances from the other professional corporate bodies in the kingdom. The efforts which were made some few years since by the Royal College of Surgeons and other medical bodies procured a redress of the grievances under which the naval assistant-surgeons laboured, and there is no doubt but that combined action would be equally successful as regards the condition of medical affairs in the army. We are glad to see that our contemporary "Punch" has taken up the cudgels on behalf of the profession, in his usual energetic manner, and that the subject is attracting the full share of public attention which it deserves.

MEDICAL MEN IN PARLIAMENT.

This topic is one which has lately created considerable interest in connection with the mention of the names of two distinguished physicians as possible candidates for the honour of representing a large metropolitan borough, one of the present members for which has announced his intention of retiring from public life. We heartily wish both gentlemen success whenever they may attempt to obtain parliamentary distinction, and, from what we know of the borough in question, we believe that either gentleman, starting with the united support of the medical men in that district, would have a very fair chance of adding M.P. to his name. Our profession has never been adequately represented in the legislative assembly, which now contains only one medical man, and when we consider how much the interests of medicine and of science would be served by proper parliamentary representation, it becomes a point well worthy of being laid to heart, whether at the next general election efforts should not be made to place matters upon a different footing, and by promoting the election of medical candidates, to secure for the profession a due share of parliamentary influence.

THE MANIA FOR FOUNDING CHARITABLE INSTITUTIONS.

Many of our readers have probably noticed lately paragraphs and advertisements going the round of the general press to the effect that hospital accommodation is urgently wanted for the north-east districts of the metropolis, that steps had been taken to remedy this deficiency, and that meetings, under distinguished patronage, would be held, for the purpose of promoting the object in view, viz., the establishment of a new hospital. The scheme was itself of a reprehensible character, and could scarcely have been supposed to originate in a desire, solely, for the public good, as there are already several excellent institutions for the relief of the sick poor in the locality specially indicated. Of these we need only name the London Hospital and the Metropolitan Free Hospital, both of which are compelled to appeal to the public for funds to enable them to carry on their work of usefulness. These institutions are, in every respect, deserving of further support. They are ably and properly managed by committees of well-known philanthropic gentlemen, aided by energetic administrative officers, and have excellent medical and surgical staffs. In fact, all that they need to ensure perfection is additional pecuniary help. In the face of this fact alone (and we could readily adduce others to prove that a new hospital is not wanted), any proposal for the establishment of another hospital is contrary to the dictates of justice and charity, for if it were carried out, it would only tend to weaken the resources of existing institutions, and would be highly detrimental to the interests of the suffering poor. We had intended to analyse in our present number the motives which could have given rise to so injurious a scheme, but, in the meantime, to use an expressive American phrase, "the bottom has fallen out" of this unwise movement, and the Committee, by internal dissension, have destroyed what little hopes they could ever have entertained of success. In a recent number of the "Times," an advertisement appeared, convening a public meeting in aid of the proposed hospital, to be presided over by Earl Granville, and the same journal has since contained several advertisements, from some of the Committee, the trustees (Lord Townsend, Lord Enfield, and Robert Hanbury, Esq., jun., M.P.), and the treasurer, *pro. tem.*, to the effect that "circumstances which have transpired in connection with this movement," render it impossible for them any longer to lend their names to it. As the wind-bag has therefore burst, we are spared the trouble of pricking it, but the lesson to be derived from the history of the affair is one of

great value, as regards the well-doing of all charitable institutions. There is in this country too much misguided charity, which, when suffered to go unchecked, is productive of harm rather than of benefit. The mania for establishing hospitals, schools, almshouses, and other public institutions, frequently originating only in a desire on the part of their promoters to see their names in print, and themselves raised for a little while to the position of public benefactors, is fostered by a want of discrimination on the part of philanthropic persons, who are induced, in many instances, as in the one to which we have referred above, to give their support to schemes which are not only untenable, but absolutely do injury by diverting attention from deserving institutions which are, already, it may be, languishing from the want of proper support.

MEDICAL INTELLIGENCE.

UNIVERSITY OF OXFORD.—At a Convocation held on May 26th, the following Examiners in Medicine were nominated and approved:—John William Ogle, M.D., Trinity College, and George Rolleston, M.D., Pembroke College.

ROYAL MEDICAL BENEVOLENT COLLEGE.—The twelfth anniversary dinner of this institution took place at Willis's Rooms, on May 14, Sir Charles Locock, Bart., M.D., in the chair. A large number of gentlemen interested in the charity were present, and subscriptions to the amount of £1,100 were announced in the course of the evening. This college, which was formally opened by the Prince Consort in 1855, contains 190 resident boys, sons of medical men, 40 of whom are foundation scholars. The report for the past year stated that a sum of £6,130 had been received from bequests to the college, the whole of which had been invested; while the balance of ordinary liabilities has been reduced by £800. It was further stated that the amount of stock belonging to the endowment fund has advanced from £3,700 to upwards of £10,000.—The Annual Election of Pensioners and Foundation Scholars was held on May 21, at the Freemasons' Tavern, when the following were elected:—Pensioner; William Baker. Foundation Scholars; William Arthur Cane, Edward Barnett Nugent, Charles William Allen, Henry Coyle Dobson, Francis Johnson, and John Wharton Dinham. The following are to be admitted in September, when two other vacancies will arise:—Charles Wynne Mosse, and George Lyle Carter.

ARMY MEDICAL BOARD OF EXAMINERS.—Mr. Prescott Hewitt has been appointed Examiner in Surgery, in the place

of Mr. Paget, who has resigned. This appointment is one which will give general satisfaction.

UNIVERSITY OF ST. ANDREWS.—At the graduates' dinner held at the London Tavern, on May 3, under the presidency of Dr. Richardson, a very appropriate testimonial was presented to Dr. Day, the late estimable and able Professor of Anatomy and Medicine in the University. It consisted of a magnificent copy of Cuvier's "Animal Kingdom," in a carved cabinet, surmounted by a time-piece, executed in the highest style of art by Mr. Rogers, the eminent carver in wood. About ninety gentlemen connected with the University, representing both Houses of Parliament, all the professions, and all branches of science and art, were present.

ROYAL COLLEGE OF SURGEONS.—Professor Fergusson will commence his course of lectures on Monday, June 6th, in the theatre of the Royal College of Surgeons, on the "Progress of Surgery during the Present Century." These lectures will be delivered on Mondays, Wednesdays, and Fridays, at four o'clock.

ST. MARY'S HOSPITAL.—GRATITUDE AND MUNIFICENCE.—At the dinner in aid of the funds of St. Mary's Hospital, which took place at the Albion Tavern, Aldersgate-street, Mr. Kempshall, the landlord of the Carlton Tavern, presented 500 guineas to the Hospital, saying that "had it not been for timely aid and succour rendered at one of the hospitals at a time when he much needed it, he would not have been there that day, and St. Mary's would have been minus his contribution."

THE ROYAL COLLEGE OF PHYSICIANS AND MISS GARRETT.—The legal advisers of the College of Physicians—the Attorney-General and Mr. Cleasby—have advised the College that they have no legal power to confer on female candidates their licence, they have, therefore, "courteously declined" Miss Garrett's application to be admitted for examination.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.—At an adjourned meeting of the governors of this institution, the tender of Messrs. Thoday and Clayton to execute the necessary repairs and alterations at a cost of £10,975, was accepted. The works will be commenced at once, and the time allowed for their execution is eight months.

BEQUESTS.—The following bequests have been made to different hospitals by G. Wheelhouse, who died at Deptford, on April 28th:—The Westminster Hospital, £500; the Middlesex Hospital, £500; the Charing Cross Hospital, £500; the Royal Free Hospital, £500; University College Hospital, £500; St. Mary's Hospital, £500; the Metropolitan Free

Hospital, £500; the Seamen's Hospital Society, £500; the Royal Hospital for Incurables, £500; the Royal Infirmary for Children and Women, £500; the Great Northern Hospital, £300; the Scarborough Dispensary (to be expended in annual sums of £10 for each year until exhausted), £200.

ST. BARTHOLOMEW'S HOSPITAL.—The Bentley Prize for the best reports of medical cases occurring in the wards during the previous year has been awarded to Mr. William Vawdrey Lush, M.R.C.S.E. A Scholarship in Medicine, Surgery, and Midwifery, has also been awarded to the same gentleman.

ROYAL COLLEGE OF PHYSICIANS.—The President and Fellows of the Royal College of Physicians have issued invitations to a *conversazione*, to take place at the College, on Saturday, June 18th, at nine o'clock, p.m.

PATHOLOGICAL SPECIMENS FOR OXFORD.—In a convocation recently held at Oxford, a grace was passed for the purchase of the pathological collection of 300 specimens formed by Professor Schroeder Van der Kolk at Utrecht. The cost will be £200.

THE EXODUS OF MEDICAL OFFICERS FROM INDIA.—We learn from the "Bengal Hurkaru" that a large number of the most distinguished of the medical officers of the late East India Company are leaving India. Many have already left, and others are about to leave.

TESTIMONIAL TO A SURGEON.—The inhabitants of Wootton Bassett and neighbourhood have presented a piece of plate to Mr. Hooper, of that place, bearing the following inscription:—"To George Downing Hooper, Esq., on his retiring after thirty-four years' professional labours, this plate, together with a purse containing 300 sovereigns, was presented by his friends and patients, to prove how deeply they loved and honoured him.—Wootton Bassett, Feb. 1864."

THE ROYAL SOCIETY.—Out of the forty-seven candidates for the Fellowship of the Royal Society the Council recommend the following fifteen for election at the meeting on June 2:—Sir H. Barkly, Dr. W. Brinton, Dr. T. S. Cobbold, Mr. A. J. Ellis, Mr. J. Evans, Mr. W. H. Flower, Mr. T. Grubb, Sir J. C. D. Hay, Dr. W. Jenner, Sir C. Locock, Mr. W. Sanders, Colonel W. J. Smythe, R.A., Lieutenant-Colonel A. Strange, Mr. R. Warrington, and Mr. N. Wood.

MEDICAL PRACTITIONERS OF PARIS.—According to the Medical Almanack for 1864 published by the *Union Médicale*, there are 1,600 Doctors of Medicine practising in the Department of the Seine; and if to these be added 270 *officiers de santé*, we have 1,870 Medical Practitioners, or (taking the

population of the Department at 1,500,000) 1 practitioner for 875 inhabitants.

HONORARY DEGREES AT CAMBRIDGE.—Amongst the list of distinguished persons upon whom the honorary degree of Doctor of Laws by special grace will be conferred during the Royal visit, we are glad to find the following names:—Dr. Watson, President of the Royal College of Physicians, Dr. A. Hofmann, and Professor Wheatstone.

PHOTOGRAPHS BY ARTIFICIAL LIGHT.—At the Society of Arts, Dr. Crace Calvert called attention to the metal magnesium, exhibited specimens of wire made from it, and showed the brilliant light which its combustion affords. This light is so intense, and possesses to so great a degree the qualities of sun-light, that photographs can readily be taken of objects illuminated by it. At the conclusion of the lecture several successful photographs were taken, in thirty seconds, by Mr. Claudet, of Theed's bust of the Prince Consort in the ante-room of the Society's lecture-hall, the first ever taken in London by means of this illuminating agent.

ILLEGAL PRACTICE.—A case was tried on Wednesday, May 11, at the Central Criminal Court, which illustrates the hopelessness of getting juries to convict illegal practitioners, even upon strong evidence. A man of the name of Stevens, who was formerly a grocer, and is now a "medical botanist," of High-street, Whitechapel, was charged with the manslaughter of a lad named William Probee. The lad was suffering from inflammation of the hip-joint, for which Stevens prescribed large doses of cayenne pepper. Dr. Letheby and Mr. Gant proved that the patient died of exhaustion following inflammatory fever and gastritis. The stomach was reddened and inflamed, and considerable quantities of cayenne pepper were found in the stomach and in the medicine the boy was taking. Nevertheless, the jury acquitted the prisoner.

SITTING-ROOMS FOR HOSPITAL PATIENTS.—Rooms of this kind are to be organized in some of the Paris hospitals, for the use of such patients as are not bedridden. They will thus escape the oftentimes unwholesome air of the wards, and be allowed to engage in such recreations as are compatible with their state of health. Nor will this arrangement be useless to those whose affections keep them in bed, as the absence of a certain number of patients for several hours a day will tend to render the air of the wards less charged with noxious emanations.

THE DENTAL HOSPITAL OF LONDON.—The second anniversary festival of this institution was held at the Westminster Palace Hotel on April 27th, A. J. B. Beresford Hope, Esq.,

in the chair. During the past year 12,250 persons were relieved, including 8,000 extractions. Subscriptions were announced at the dinner to the amount of £300.

PASS-LISTS.

UNIVERSITY OF ST. ANDREWS.—The following is a list of the gentlemen on whom the degree of M.D. was conferred on April 29th :—Charsley, W. P., Ceylon ; Fenton, John, Liverpool ; Irwin, Wm. N., Monaghan, Ireland ; Kelly, Walter Crook, Durham ; Lush, John Alfred, Salisbury ; Parker, William, Bermondsey ; Starkey, William, Sutton Vallance, Kent ; Smith, J. Sydney, Tiverton ; Walsh, James, Limerick ; Wilson, Thomas, Hull.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma of membership, were admitted Members of the College on May 10th :—Bertin, H. Victor, St. John's Wood ; Brewer, Charles Claridge, Newport, Monmouthshire ; Broughton, Henry Todd, Bradford, Yorkshire ; Burrell, Edwin, Westley, near Bury St. Edmunds ; Coates, George Alexander Augustus, Sirhowy, Monmouthshire ; Conyers, James S., Demerara, West Indies ; Drust, John, Gainsborough ; Earle, Robert Charles, Totnes, Devon ; Goodfellow, William Richard, Commercial-road ; Grewcock, George, Folkingham, Lincolnshire ; Hawken, Charles St. Aubyn, Redruth ; Hayes, Thomas Edward Darley, Liverpool ; Hume, Frederick Henry, Angel-terrace, Islington ; Jackson, Henry Gilbert, Leeds ; Knight, Charles Frederick, Brill, Bucks ; Mann, William Slingsby, Birmingham ; Masser, Herbert Charles Pickard, Langford, near Coventry ; Morris, Joseph, Studley, Warwickshire ; Paddon, George, Hitchin, Herts ; Smith, Henry Richard, Newark, Notts ; Spurgin, Herbert Branwhite, Thrapston, Northamptonshire ; Thibon, Jesse Wheelock, Antigua, West Indies ; Ward, Martindale Cowslade, Markham-square, Chelsea. The following Members were admitted on May 11th :—Allen, Robert Francis, Cloughjordan, Co. Tipperary ; Barrett, Joseph William, Eton ; Busby, Ralph Alexander, Leamington ; Caldwell, John Thomas, Knutsford, Cheshire ; Colthurst, James Bunter, Bristol ; Cronin, Eugene Francis, Clapham ; Dykes, William Astly Sherratt, Hull ; Eatock, John Albert, Rivington, near Bolton ; Flint, William Henry, Buxton, Derbyshire ; Foster, Charles William Ellis, Aldershot ; Harding, Peter, Shrewsbury ; Martin, James Hamilton, Tregony, Cornwall ; Milburn, Frederick, Leiston, Saxmundham ; Miller, Andrew, Highbury ; Oxley, Charles Fox, Pontefract ; Peacock, Albert Louis, Huntingdon ; Rudd, William Askwith, Hull ; Smith, Walter, Bognor ; Sparling, William Augustus, Norwich ; Williams, John, Anglesea ; Woodgate, Samuel Henry, Hereford. At the same meeting, Anderson, William, passed the examination for Naval Surgeon. The following were admitted to the Membership on May 24th :—Armstrong, Henry Edward, Newcastle ; Beckett, Francis Mears, Canterbury ; Brewer, Henry Melvill, Newport, Monmouthshire ; Burne, Joseph, Dublin ; Churchill, John Foot, Poole ; Douglas, George Fox, Grantham ; Dickenson, Frederick Fludd, Wicklow ; Edwards, Henry Nelson, Finsbury-square ; Fowler, Oliver Humphrey, Kingsclere, Hants ; Fry, Augustin Barber, Sleaford ; Gedge, Joseph, Bexhill, Surrey ; Knipe, William Melville, Leigh Sinton, Worcestershire ; Mason, Philip Brookes, Burton-on-Trent ; Phillips, Thomas Richards, Dublin ; Sanders, Thomas, Plymouth ; Shorto, William Burt, Southampton ; Smith, Edward Roberts, Dudley ; Wills, Charles James, Stockwell ; Wise Andrew, Plumstead. On the same day, Devonshire, Charles James (diploma of membership, dated

April 4th, 1855) passed the examination for Naval Surgeon. At the Court of Examiners held on May 25th, the following Members were admitted:—Burrows, William, Liverpool; Borough, Edward, Kilrush, County Clare; Cantrell, Matthew Henry, Wirksworth; Cross, William, Liverpool; Fox, Charles James, Mortimer-street, Cavendish-square; Hinds, William Riphard, Galway; Levick, George, Stratford, Essex; Lyde, William Vacy, Harrow-road; Norrish, John, Ceylon; Read, Charles, Falmouth; Roberts, Augustus Morton, Sheffield; Squarey, Charles Edward, Salisbury; Strange, William Heath, Streatley, near Reading; Tomlinson, Daniel Webster, Penynant, North Wales; Watson, Nicholas Fairles, South Shields.

APOTHECARIES' HALL.—The following gentlemen passed the examination, and received certificates to practice, on the undermentioned days:—April 28th.—Blick, Thomas Edward, Islip, near Oxford; Sutcliffe, William Henry, Manchester; also on the same day, Thomas, David Howell, St. Bartholomew's Hospital, passed his first examination. May 5th.—Knott, Thomas Henry, Guy's Hospital; as an Assistant, Evans, John, Cardiff; and for the first examination, Taylor, James, Anderson's University, Glasgow. May 12th.—Ashton, John Henry, 10, Upper Barnsbury-street, Islington; Gibson, Robert Chapman, Fyfield, Ongar, Essex; Jones, William, Trewalter, Brecon; Kiernander, William Coleridge, Brunswick-square; Marshall, William Norris, Upper Northgate-street, Chester. The following passed the first examination:—Birtwell, Henry Hargreaves, St. Thomas's Hospital; Spooner, Edward Monroe, London Hospital. May 19th.—Cowen, Philip, Kennington; Davey, Francis Albert, Bath; Ensor, John Arthur, Carter-street, Walworth; Heygate, William Nicholas, Hanslope, Bucks; Ireland, John Roaf, Kingswinford, Staffordshire; Jenkins, Evan, Cardigan-street, S.W.; Pearlless, Charles Durrant, East Grinstead; Richards, Frederick Wiliam, Winchester; Smallman, Edwin Charles, Barnet; Thomas Robert Wrentmore, Cheyne-walk, Chelsea; Wagstaffe, William Warwick, Walcot-place, Kennington; Warburton, Joseph Wilkinson, Royal Infirmary, Liverpool; Wilson, Henry, Glasgow. The following gentleman passed the first examination on the same day:—Andrews, Richard James, Guy's Hospital.

MEDICAL VACANCIES.

RYE UNION.—For a Medical Officer for No. 1 District, and for the Union Workhouse. Salary for District, £102, with usual Poor-Law extras; for the Workhouse, £30. Applications to be sent to the Clerk to the Guardians before June 11th.

ROYAL PIMLICO DISPENSARY.—For a House Surgeon. Salary, £110, with unfurnished apartments, &c. Applications to be sent, before June 7th, to the Honorary Secretary at the Dispensary, 30, Upper Belgrave-place, S.W.—Also, for a Dispenser. Salary £50. Attendance required from 10 to 2 o'clock, and 6 to 8 p.m.

NOTTINGHAM COUNTY ALYLUM.—For an Assistant Medical Officer. Salary, £60 per annum, with board, lodging, &c. Election on June 2nd.

ARMY MEDICAL DEPARTMENT.—For Assistant-Surgeons. The Competitive Examination, for which candidates must be under 30 years of age, will be held on August 8th. Full particulars can be obtained of Dr. Gibson, Director-General of the Army Medical Department, 6, Whitehall Yard, S.W.

BIRMINGHAM LYING-IN HOSPITAL.—For a Resident Surgeon. Particulars to be obtained from the Secretary, Mr. Gell, at the Hospital, Broad Street, Birmingham.

TICEHURST UNION.—For a Medical Officer for the parish of Ticehurst, and the Union Workhouse. Salary £105 per annum, with usual extras. Election fixed for June 2nd.

MEDICAL APPOINTMENTS.

- ATKINSON, E., Esq.—Surgeon to the Leeds Dispensary.
BALLANTINE, R., M.D.—Surgeon to the Prison at Jedburgh.
BANKS, A. J. H., Esq.—Medical Officer to No. 4 District, Shepton Mallett Union, Somerset.
BARKLEY, W., Esq.—Assistant Dental-Surgeon to the National Dental Hospital.
BEVIS, C., M.D.—Resident Medical Officer to the Leeds Fever Hospital.
BLAKER, N. P., Esq.—House Surgeon to the Sussex County Hospital.
CAIRNS, T., M.D.—Medical Officer to the Royal Dispensary, Edinburgh.
CARSON, T. Esq.—Resident Assistant-Surgeon to the Dispensaries, Liverpool.
CLARK, J., M.D.—Medical Officer to the Ogley-Way District of the Lichfield Union.
COLLIE, A., M.D.—Resident Assistant-Physician to the Royal Infirmary, Dundee.
COMPSON, J. C., Esq.—House-Surgeon to the Leith Hospital.
CONSTABLE, J. J., M.D.—Medical Officer to the No. 1 District of the Dulverton Union.
COWIE, J., M.D.—Admiralty Surgeon at Lerwick.
DANIEL, E. M., Esq.—Medical Officer to the Fleetwood District of the Fylde Union, Lancashire.
DAWSON, T. Esq.—Medical Officer to the Stoke-Lyne District of the Bicester Union, Oxfordshire.
EVERSHED, A. Esq.—Medical Officer to the Amptill District of the Amptill Union.
FAIRBANK, F. R., Esq.—Surgeon to the Ardwick Dispensary, Manchester.
FRASER, G. R. Esq.—Medical Officer to No. 5 District Bellingham Union, Northumberland.
GORDON, A., M.D.—Medical Officer to the Bishopstone District, Wilton Union, Wilts.
HAINES, B. W., Esq.—House Physician to King's College Hospital.
HAUGHTON, E., Esq.—House-Surgeon to the General Dispensary, Rochdale.
HAWKES, J., M.D.—Assistant Medical Officer Female Department, Hanwell Lunatic Asylum.
HEYGATE, W. N., Esq.—Resident Accoucheur, at St. Thomas's Hospital.
JEFFERY, E., Esq.—Surgeon to the Yeovil Infirmary.
KEMETHORNE, H. L., Esq.—Resident Accoucheur at King's College Hospital.
LUND, R. T., M.D.—Surgeon to the Leeds Dispensary.
LEESON, J. F., Esq.—Medical Officer for Union Workhouse, Bradford, Yorkshire.
LEWIS, J. P., Esq.—Medical Officer for the Basingstoke District of the Basingstoke Union, Hants.
LINDSAY, J. M., M.D.—Resident Medical Superintendent of the Female Department at the Middlesex County Lunatic Asylum, Hanwell.
LLOYD, E. S., Esq.—Medical Officer, for No 8 District of the Bedminster Union, Somersetshire.
LOGAN, W., Esq.—Certifying Factory Surgeon at Jedburgh, Scotland.
MACARTHUR, A. J., M.D.—Medical Officer for the parish of Kilrenny, Fife-shire.
MARCH, H. C., M.B.—Surgeon to the Police Force at Rochdale.
METEYARD, C. J., Esq.—Medical Officer for the Hopesay District of the Clun Union, Salop.
MORRIS, W. W., M.B.—Medical Officer for the Clun District of the Clun Union.

- MUMFORD, W. L., Esq.—Medical Officer for the No. 6 District of the Stow Union, Suffolk.
- NICHOLLS, J., M.D.—Medical Officer for the No. 2 District of the Dulverton Union, Somersetshire.
- POWELL, W., M.B.—Resident Medical Officer to the Tower Hamlets Dispensary, Commercial-road.
- RICHMOND, S., Esq.—House-Surgeon to King's College Hospital.
- RICKARDS, W., Esq.—Resident Medical Officer to University College Hospital.
- ROE, W., M.D.—Assistant House-Surgeon to the Dispensaries, Liverpool.
- SHEEN, A., M.D.—House-Surgeon to the Glamorganshire and Monmouthshire Dispensary, Cardiff.
- SMITH, Aquila, M.D.—King's Professor of Materia Medica in the School of Physic at Dublin.
- SOUTHEY, Reginald, M.B.—Assistant Physician to the City of London Hospital for Diseases of the Chest.
- SPURGIN, B., Esq.—Medical Officer for No. 2 District of the Thrapstone Union, Northamptonshire.
- STAINTHORPE, T., Esq.—Medical Officer for the Sholtey District of the Hexham Union, Northumberland.
- TAYLOR, H., Esq.—Resident Medical Officer to the Norwich Dispensary.
- TREVOR, W., Esq.—Medical Officer for the Union Workhouse of the Dulverton Union, Somerset.
- WALKER, R., Esq.—Medical Officer for the Stanwix District of the Carlisle Union.
- WALLIS, A. W. Esq.—Medical Officer for the Brentwood District of the Billericay Union, Essex.
- WEBB, C., Esq.—Medical Officer for the Basingstoke Workhouse, Hants.
- WILLIAMS, C., M.D.—Consulting Physician to the York County Lunatic Asylum.
- WILSON, F. W., M.B.—Medical Officer for the North District of the West London Union.
- WOODS, T., M.D.—Surgeon to the Parsonstown Gaol, Ireland.
- WRIGHT, F., Esq.—Medical Officer for the Bishops-Wilton District of the Pockingham Union, Yorkshire.

DEATHS.

- COCKE, Thomas Golding, L.S.A., at Chapel Halstead, Essex, on May 9, aged 57.
- COOKE, C. T., M.R.C.S., at Cambray, Cheltenham, on May 1, aged 69.
- COOPER, Henry Ralph, M.R.C.S., at Ixworth, Suffolk, on May 2, aged 49.
- CURTIS, J. W., M.D., at Alton, on April 27th, aged 50.
- BROWN, John Bell, Esq., at 12, Palmerston-terrace, Camberwell, on May 21st, aged 57.
- BROWNE, R., L.R.C.S.I., Surgeon-Major 25th Regiment, at Kiltegan, Baltinglass, Co. Wicklow, on May 9th.
- DAWSON, W., M.R.C.S., at Southgate, Wakefield, on April 26th, aged 65. The deceased gentleman was Senior Surgeon to the Wakefield General Dispensary and Clayton Hospital, and an Alderman for the borough of Wakefield.
- EMANUEL, Leonard, M.D., Assistant-Surgeon H.M. Bengal Army, at 21, Inverness-road, Bayswater, aged 29. Dr. Emanuel was formerly a Student at University College, where he distinguished himself by the high position which he took at the different class examinations.
- JOCE, John, M.R.C.S., at Colchester, Essex, on May 4th, aged 58.

JOHNS, Roberts, M.B., F.R.C.S.I., at Lower Fitzwilliam-street, Dublin, on May 11th, aged 49. The deceased was Vice-President of the Obstetrical Society of Dublin, Consulting Accoucheur to the Anglesey and Peter-street Hospitals, and to the Coombe Lying-In Hospital, and Chairman of the Board of Examiners in Midwifery at the Royal College of Surgeons of Ireland. He contributed numerous articles in obstetrical subjects to the medical journals.

HOWELL, T., M.R.C.S., of the New Kent-road, on May 8th, aged 49.

KELLY, John, M.D., on April 30th, at Notting-hill.

LEWER, John, M.R.C.S., at Whampoa, China, on March 7, aged 43.

NORMANDY, W., M.D., at Odin Lodge, Clapham, on May 10, aged 54. The deceased was well known as a practical chemist, and especially as an analyst. Amongst the valuable works which he produced were "A Treatise on Agricultural Chemistry;" "The Handbook of Chemistry;" "A Guide to the Alkalimetric Chest;" "The Chemical Atlas," a very important contribution to the science of chemical analysis: and "The Dictionary of the Chemical Atlas." He also contributed many scattered papers to various scientific journals, and assisted in bringing out the last edition of the "Dictionary of the Arts and Manufactures," by Dr. Ure, with whom he was for many years associated as a fellow-worker in chemical investigations. He turned his knowledge to account in several useful inventions, the principal of which was that for the distillation of sea-water, and which is now adopted in many ships going for long voyages.

ORTON, RICHARD, M.R.C.S., at Beeston, Notts, on April 25, aged 24.

RIACH, JOHN, M.D., at Allanbank, near Perth, suddenly from apoplexy, on May 14, aged 73. He was formerly Surgeon to Her Majesty's 67th Regiment, and was present at the battle of Waterloo.

SKINNER, H. T., M.D., at Sandyford-place, Glasgow, on May 13.

TAYLOR, J., Esq., Surgeon, R.N., at New Passage, Gloucester, on May 13, aged 75.

TOMKINS, CHARLES, M.D., of Weston-super-Mare, Somersetshire, on May 17, aged 68.

TRIMBLE, J., M.D., at Castlebellingham, co. Louth, Ireland, on May 6.

WELLS, ANTHONY, M.R.C.S., at Basingstoke, Hants, on May 15.

BOOKS, ETC., RECEIVED.

"The Annals of Military and Naval Surgery."

"On the Anomalies of Accommodation and Refraction of the Eye." By F. C. Donders, M.D. Translated by W. D. Moore, M.D.

"On the Laryngoscope, and its Clinical Application. By T. J. Walker, M.D.

"The Home Nurse and Manual for the Sick Room." By Esther Le Hardy.

"On Change of Climate; A Guide for Travellers in pursuit of Health." By Thomas Moore Madden, M.D.

"On Santonine; with especial Reference to its use in the Treatment of the Round and the Thread Worm." By William Anderson, M.D.

"Anniversary Address delivered before the Anthropological Society of London." By James Hunt, F.S.A., President of the Society.

"De la Resection de la Hanche dans les Cas de Coxalgie, et de Plaies par Armes à Feu." By Léon Le Fort.

"The Mortality of Childhood." By L. F. Crummey, M.R.C.S.

"All about Shakspeare."

"The American Quarterly Journal of the Medical Sciences." April Number.

- "The Pharmaceutical Journal," for May.
"The Social Science Review," for May.
"The Dental Review" (Quarterly), May Number.
"The Anthropological Review" (Quarterly), May Number.
"Gazette Médicale de Paris." Received regularly every week.
"On the Nature, Causes and Treatment of Bodily Deformities." By
E. J. Chance, F.R.C.S
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TO CORRESPONDENTS.

- DR. D.—The paper is unsuited for our columns, and shall be returned.
G. A. M. should have added three more letters to his initials, which would have shown him the nature of the report to which he refers. It was simply a *canard* got up by one of the weekly medical journals.
S.—We have received the communication relative to the so-called "Court-Medical" at Greenwich, but must decline to insert it, as the sooner this matter is forgotten the better. We know of nothing more calculated to create and foment unpleasant professional dissensions than that of calling a number of practitioners together for the purpose of settling a disputed question between two of their brethren, as the late "Court-Medical" has proved. The proper method to adopt when one medical man has a grievance against another which cannot be privately explained away is for them to appoint two professional referees, one selected by each of the disputants, whose decision in the affair shall be accepted as final.
ONE WHO DISLIKES BAD SMELLS ought to use Condyl's Disinfecting Fluid. It is the cheapest and best deodoriser and disinfectant that we know of, and is an indispensable household requisite during the present warm season.
G. B.—The Liq. Chloroformi Co. to which our correspondent alludes in his note, is a modification of chlorodyne devised by Mr. Towle. It does not contain any peppermint, so that it does not give rise to the unpleasant eructations frequently complained of by patients after taking the ordinary preparation.
A. SUBSCRIBER (Birmingham).—We shall be glad to hear again from this gentleman.
* * * We are again compelled by pressure of original matter to postpone the insertion of the "Retrospect of the Medical Journals."
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SPECIAL NOTICE.—Gentlemen who have not yet forwarded their subscriptions are requested to observe that these are *payable in advance*, as a very considerable reduction in the price of the "Medical Mirror" is made to subscribers. As frequent inquiries have been made relative to the period from which subscriptions date, it may be here stated that a subscriber can have the periodical supplied to him, commencing at any period agreeable to himself; but it may also be added, for the information of gentlemen who desire to possess perfect sets of the "Medical Mirror," that only a limited number of copies of the earlier numbers are in hand, and that prompt application is necessary in order to avoid disappointment. Instead of dividing the year's issue into two small volumes, it has been determined to combine the twelve numbers for each year into one good-sized volume, of nearly 800 pages, with a copious Index, free to subscribers.

THE MEDICAL MIRROR.

JULY, 1864.

ORIGINAL COMMUNICATIONS.

Essays and Reviews, on Affections of the Nervous System, including their Pathology and Treatment. By WILLIAM CAMPS, M.D., Member of the Royal College of Physicians, London, etc., etc.

“PRACTICE WITH SCIENCE.”

No. 1.—*On Hysteria, and the Hysterical Constitution or Temperament.*

In the remarks, introductory to the subject of *Affections of the Nervous System*, I stated (*vide* page 331, in the last number of the “Medical Mirror,”) that it was my intention to treat of affections of the nervous system, attended with *impaired* and *perverted motion*; of affections of the same system attended with *impaired* or *perverted sensation*; and of affections of the same system attended with *impaired* or *perverted intelligence*; and at the conclusion of those remarks, *vide* page 334, I also stated, that it was my intention in the next number of this journal to enter upon the consideration of *Hysteria* and the *Hysterical Constitution or Temperament*. And I do so chiefly for this reason: that, in my judgment, this disease, *hysteria*, when presented to our observation in practice, in fully developed, I will not say in exaggerated cases, not unfrequently offers to our notice, instances in which are comprised, one, or more, or on rare occasions, simultaneously, all these three perplexing and important disturbances of the bodily and mental functions; namely, *impaired* and *perverted motion*, *impaired* and *perverted sensation*, and *impaired* and *perverted intelligence*.

Sometimes the hysterical affection which we may be

called upon to treat or relieve, is attended with one, sometimes with another of these abnormal, unhealthy conditions; yet, as a general proposition, it may be stated, that in very many, in most, if not in all such cases, the volitional power, or, to speak in more simple language, to express in plainer terms the condition referred to, we may say that the due, proper, healthy command over the will, is *impaired, antagonised*, and occasionally even *overcome*. In my opinion, if there be any one physical bodily ailment or disease whatever which might be regarded as forming, or constituting a connecting link between diseases of the body and diseases of the mind, or, in other words, between *mental* and *bodily* disease, it is this one now under consideration, *hysteria*. It is in my power to give a somewhat striking and remarkable instance of the truth of this statement just now made, with reference to the position which hysteria may be said to hold as a link between mental and bodily disease, disorder, or derangement. Some time ago, I had under my care a patient affected with hysteria, *chronic*, be it observed, not *acute*, who, during my attendance, frequently assured me, that when thus affected, it was at times as though the *mental* condition was as much altered as was the *bodily* condition. However this may be, I can confidently affirm, that occasionally, during this attack of illness, the power the patient possessed to penetrate into, and to discriminate between, the various shades of character in those around, whether attendants, friends, acquaintances, or strangers, was very great. The patient was certainly more quick at observation, more clever, more ingenious, and penetrating, in reading countenances, and in interpreting motives of conduct and action, than any of those around, whether as visitors, or as attendants. In a subsequent number of this journal I hope to give in detail many of the remarkable symptoms or phenomena which I observed from time to time in this patient, as well as in many others that have been under my own observation and treatment, with varying degrees of success.

It will be a more fitting occasion to do this, when I come to advert to the symptomatology of hysteria, and of other nervous disorders; for, in my judgment, it is mainly, by observing and recording such, and similar facts and observations, that we can at all hope to unravel with success the almost inextricable perplexity in which at present many nervous diseases still remain. Nothing, I am convinced, will tend more to draw aside the curtain which as yet conceals from our clear, distinct perception of the true causation of nervous diseases, than a careful, patient, laborious observation and record of these symptoms and phenomena as they present

themselves to our notice, as medical observers and practitioners.

Be it observed, that very few, even of the worst cases, although attended with distressing and painful concomitants, are but seldom attended with fatal results; and even if it were so, in my opinion, after-death examinations of the body would do but little towards revealing to us the true causation of the diseases themselves. And even in the living subject, whilst under medical care and treatment, the application of organic chemistry, and the use of the microscope from time to time will, I fear, but in few instances, be productive of very fruitful and satisfactory results. Still, however, these valuable aids to diagnosis and treatment must not be neglected, whilst a proper value should be assigned to any pathological facts with which their application may happily furnish us. We must gladly avail ourselves of any and of every adjunct that may be reasonably expected to throw additional light upon our present obscurity, and so to rescue us from error and from ignorance, the two worst enemies to human health and happiness.

A better acquaintance with diseases of the nervous system, or, in other words, the removal of error and ignorance in regard to them, will do more than almost anything else to rescue many of our suffering and afflicted fellow human beings from the relentless hands of the pretenders to medical science and practice scattered up and down throughout the metropolis and the country at large. The medical name of the disease under consideration—Hysteria—as is well known, is derived from the Greek word for the uterus or womb, *Hysteros*—I forbear the use of the Greek characters of the word—from the ancient and long continued, but erroneous opinion that it arose from some disorder in that organ; but, inasmuch as the disease in question is not confined to the female sex, this opinion must be now discarded.

I have seen several well-marked cases of the disease in the male subject, the details of which I may hereafter lay before the readers of this journal; but I do not remember ever to have seen it in either male or female subject until after the age of puberty, and more commonly in both sexes during the period of manhood or of womanhood. I propose to treat subsequently of this period of life in both sexes, and of the influence of the passions at that period, as factors in the production of nervous diseases of one kind or another. There are certain portions of the nervous masses of the body situated within the abdomen in both sexes, which, in my opinion, have much more to do in the production of hysteria than has been commonly supposed, and of these two nervous

masses, the spermatic and hypogastric plexus of nerves play a most important part. And to the former of these, when disordered either in function or in structure, we may refer very many of the troublesome, perplexing phenomena observed in severe, obstinate, intractable cases of hysteria.

Let us now, for a moment, consider how, in what manner, and by what means the *spermatic plexus* is formed, made up, or constituted, and in attempting to effect this little piece of descriptive anatomy, it will be sufficient for present purposes to take as our starting point the convex or lower part of the semilunar ganglion, the result, for the most part, of anastomosing branches of the great sympathetic or intercostal nerve, and from the lower or convex part of which many nervous filaments or branches are given off, which filaments or branches, reinforced by others from the trunk itself of the great sympathetic or intercostal nerves, form behind the kidneys a plexus of nerves of a considerable size, in which, most commonly, although not universally observed, are disseminated numerous small nervous ganglions. To this nervous plexus thus constituted has been given the name of *renal plexus*, from its destination and distribution to the *renal* or *emulgent* artery, and its branches through the substance of the kidney and the suprarenal capsules. Anatomy teaches us that whether the capsular artery arises directly from the aorta, or whether it arises as a branch from the renal or emulgent artery, filaments from the renal plexus of nerves accompany it in its course of distribution through the substance of the suprarenal capsule. The renal plexus of the right side of the body has a direct communication by numerous nervous filaments with the hepatic plexus, whilst the renal plexus of the left side of the body has a direct communication by numerous similar filaments with the splenic plexus, and both right and left renal plexus receive filaments of reinforcement from the great stomachic nervous plexus. These anatomical facts have no inconsiderable bearing even upon the subject now under consideration—the hysterical constitution or temperament; but when I come, in a future paper, to speak of the chief or prominent symptoms, the symptomatology of hysteria, and more particularly of its paroxysmal characters, the pathological application of these anatomical facts will, I trust, be rendered at once evident and important, and consequently well deserving close attention; and, therefore, I offer no apology for advertising to them at this time. From the lower part of the renal plexus of nerves there pass off certain nervous filaments, which, uniting with others from the mesenteric plexus, form or constitute the plexus of nerves, occasionally attended with a nervous ganglion, from which ganglion, when present, and

plexus, arise the special nerves which, in their course of distribution, accompany the spermatic blood-vessels, proceeding to the testicles in the male, and to the ovaries in the female, and to the external parts of generation. To this nervous plexus thus constituted, anatomists have given the name *spermatic plexus*, and it is the *spermatic plexus* chiefly, together with another plexus named the hypogastric plexus, that, in my judgment, plays so important a part in the morbid phenomena observable in cases of hysteria. At the proper time I shall produce evidence in favour of this statement; that it is to the *spermatic nervous plexus* we must look, rather than to the uterus, for satisfactory explanation of the morbid phenomena of this disease; in fact, certain of the phenomena or symptoms observed in some cases of hysteria could not possibly be accounted for, on the supposition that they were altogether, or even in any way, due to derangements in the uterus, as, for instance, what shall we say in regard to cases of hysteria occurring in the male sex, as I maintain they do occasionally; for in these cases, no one will be absurd enough to impute such, whenever they occur, to derangements in an organ never present, but always absent in that sex.

I entertain but little, if any, doubt that these two nervous plexuses, with their nervous ganglia, the spermatic and hypogastric plexus, constitute the efficient factors or producers of that assemblage of symptoms constituting the disease now referred to. Let it be well borne in mind that the nervous energy, agency, or power supplied by them is distributed to all the parts or organs contained within the pelvis in the two sexes, both male and female; as also to the lower intestines, the rectum, to the various parts of the bladder, to the uterus, to the broad ligament, and to the fallopian tube, with its fimbriated extremity, in the female. Anatomy further teaches us that these nervous plexuses and ganglia contain but few nervous filaments derived from the cerebro-spinal axis, but that they are constituted almost entirely of derivations from the trunk of the great sympathetic or internal intercostal nerve.

I have repeatedly, when, on various occasions, reading papers on nervous diseases before the medical societies of the metropolis, maintained, that further investigations into the functions of this great nerve and its derivations, would lay open to us a very wide and extended domain of pathology, and consequently of medical treatment of disease; and that further research into this subject would not fail to pour upon us a flood of light, over some of the dark, obscure paths of medicine, along which we had hitherto groped our way, guided only by the dimness of empiricism itself. A further

and more extended acquaintance with the normal healthy operations in the organic, as well as in the animal nervous system, cannot fail to enable us to understand, and consequently to appreciate at a better and true pathological value, the abnormal and unhealthy operations observed in the same nervous systems respectively. Already the scientific labours of Claude-Bernard, Brown-Séquard, and many others in the same field, have enabled us to comprehend much that, until now, was always painfully, and often pathologically obscure, and consequently unsatisfactory.

The importance of a due estimation of temperament or constitution in discussing the disease now under consideration, will be made even more evident than it now is, when, in subsequent numbers of this journal, I come to treat of another severe, intractable disease of the nervous system—epilepsy; in doing which it is my intention to enter at some length upon the consideration of what I term the epileptic temperament or constitution. For, as in the production of the paroxysms of epilepsy, so in the productions of paroxysms of hysteria, two states or conditions of the body, or certain parts of the body, are absolutely essential; in the former disease—epilepsy, these are—first, a tendency or disposition of the brain or spinal cord, or both together, to assume a state of contraction more readily than in health; and, secondly, the presence of some irritating cause or causes, which in their operation upon this, or upon these organs, compel or excite this tendency or disposition to assume an abnormal or unhealthy state of contraction. So, too, in the latter disease, hysteria, two states or conditions of the body, or of certain parts of the body, are absolutely essential, these are—first, a tendency or disposition of certain parts of the nervous system to assume a state of contraction more readily than in health; and, secondly, the presence of some irritating cause or causes, which, in their operation upon these parts of the nervous system, compel or excite this tendency or disposition to assume an abnormal or unhealthy state of contraction. It will, I think, be in my power to adduce good evidence, derived from cases met with in practice, denoting a manifest connection between these two severe, intractable diseases; in fact, in very severe forms of hysterical paroxysms, it is by no means easy to discriminate between the two diseases. One of the very worst cases of hysteria I ever witnessed, was one under my own care in this neighbourhood, in which the attack or paroxysm so closely resembled an attack or paroxysm of epilepsy, that it was not until after consulting with a physician of acknowledged reputation that I was able to satisfy myself which of two diseases I had to

treat. Severe, however, as was that attack, the patient had a good, complete recovery, and has continued well from that time until this, a period now of some years duration.

Amongst the lectures which Dr. Brown-Séquard delivered at the National Hospital for Paralysis and Epilepsy, in Queen-square, were one or two upon Hysteria; but, unfortunately, I was unable to hear them, owing to other engagements; yet, from conversation with him subsequently, I think I am correct in stating that he is of opinion that the hysterical temperament, or tendency to hysteria, is not unfrequently as intractable to deal with, as difficult of cure as, even if not more so than, is epilepsy itself.

The ancient practitioners of the healing art, in their discourses on medicine, direct the attention of their readers to what they called *temperaments*, or different conditions of *constitutions*; but for the want of accurate physiological knowledge of most parts or organs, as well solid as fluid, of the human framework, they greatly failed in demonstrations in regard to these subjects, or to express the fact; in other words, their descriptions of these subjects were very imperfect, owing to want of a more exact information. Advancing, progressive scientific information, here as in many other departments of general pathology, has by slow, yet, it is hoped, by no uncertain steps, removed extensively the dark veil of obscurity which long hung suspended between the human mind and the operations of nature. By many of the moderns, too, by which term I would be understood to mean those practitioners of the healing art who flourished and wrote endless treatises on the theory and practice of medicine, the study and observation of the temperaments or constitutions, and consequently of the doctrines deducible therefrom, have been almost altogether neglected. It is much to be desired, that the diverse temperaments and constitutions which undoubtedly exist in nature, differing in different individuals, and in different members of the same families, should be more accurately scrutinized, and more carefully observed, by means of light to be derived from a more enlarged acquaintance with the principles of modern science, as applied to various functions of the body, as the circulation of the blood, respiration, absorption, and innervation, &c., &c.; the application, for instance, of organic chemistry to the known differences in constitution between arterial and nervous blood, the recent discoveries made in the anatomy and physiology of the lymphatic system, the exact constitution of the fluids therein contained; the chemical analysis, in fact, of all the solids and fluids of the body, with that of the various secretions and excretions, as they exist in different

individuals; the discoveries in regard to, and experiments upon, the nerves themselves; discoveries in regard to, and experiments upon, electricity, galvanism, &c., and their modifications; also upon heat, light, and the atmosphere, &c., &c., must unitedly tend to remove from the medical mind much that still remains of obscurity, ignorance, and prejudice.

To our own English physician—Sydenham—more is perhaps due, as an observer of nervous disorders, than to any other physician living before his time; he has, moreover, in his works, left behind him one of the best and most graphic descriptions of the vapours in females; to him, too is due the clear perception of diseases of the nerves—doubtless hysteria in one or more of its forms—assuming the characters of almost every other form of disorder. I am not sure that he speaks of hysteria, and of nervous diseases, as proteiform in character; although, however, he remarks that at one or more times nervous disorders are capable of assuming the characters of almost every disease; and that all these symptoms observed, however varied and multiplied, depend solely, or for the most part, upon too much or too little, upon excess or upon deficiency, of nervous action, agency, or energy. In the course of my papers upon affections of the nervous system, I shall have repeated occasions to refer to the writings and opinions of Sydenham: and possibly, next to him, amongst other physicians of the last century belonging to our own country, to one of a later date—Cheyne—who, like his predecessor, Sydenham, has left behind him many valuable observations upon the general pathology of nervous disorders. Much attention, however, as Sydenham had given to, and much observation as he had made upon, diseases of the nervous class, neither he, nor his contemporary Willis, nor even later, Cheyne, nor his contemporary Hoffman, most probably from insufficient physiological knowledge, appear to have recognised the true pathological import of many of the symptoms which they severally observed and recorded.

To a French physician, Charles Pison, of Lorraine, is justly due the merit of being the first to assign to hysteria its proper nosological position, as a disorder of the nervous system, as he did in a work published in 1618, some years before either Sydenham or Willis gave to the world the results of their very valuable observations, whether relating to practical medicine, or to anatomical and physiological researches. Whatever has been hitherto advanced only in a very general manner, will, I trust, be further illustrated and confirmed by additional particulars, on which, in subsequent pages of this journal, it is my present intention to enlarge. For nothing whatever can afford stronger evidence of having

lighted upon true and correct principles than when unfolding, illustrating, and considering them in different, diversified ramifications, we find they are invariably conformable to the nature of things; or, in other words, to things as they are; to accurately observed phenomena, or facts. We shall continue this subject in a subsequent number of the "Medical Mirror."

On Keratitis. By W. S. WATSON, F.R.C.S., Assistant-Surgeon to King's College Hospital, Clinical Assistant, Royal London Ophthalmic Hospital, etc.

THE principal object proposed in the following pages is an inquiry into the influence exerted by constitutional and local conditions respectively in the production of inflammatory affections of the cornea, and the consequent modifications of treatment which the results of such an inquiry must involve. That some cases of inflammation of the cornea, such as those arising from injuries, inverted eyelashes, and granular lids, are immediately the effects of the local conditions of the parts, and independent of any constitutional disease, will not, I suppose, be disputed; but there are others of a more doubtful nature, of which it is often difficult to determine the exciting or predisposing causes, or whether, in fact, local conditions as well as constitutional disease may not be combined in the production of the local effect—and as instances of such I may adduce the strumous ophthalmia and the secondary ophthalmia after small-pox, in both of which there is at the same time a discharge of sero-purulent or purulent matter from the conjunctiva sufficiently irritating to cause great local disturbance, and a constitutional dyscrasia calculated to interfere with the nutrition of the parts.

It will, however, be convenient to divide all cases of keratitis into three classes, and subsequently consider how far such a classification is in accordance with pathology, or useful as a guide in treatment.

Division 1. *Keratitis* from *mechanical causes* or *local conditions*.

- a. Injuries by foreign bodies.
- β. Inverted eyelashes, entropium, granular lids.
- γ. Irritating discharges, *e. g.* Purulent ophthalmia, measles, mucocele, &c.
- δ. Palsy of the lids from lesion of the 7th pair of nerves, or anæsthesia of the lids from lesion of the 5th.
- ε. Proptosis, as in exophthalmic goître and ectropium.

- ζ. Possibly Sclerochoroiditis Posterior, as seen in progressive Myopia.

Division 2. *Keratitis* from local and constitutional causes combined.

- α. Ophthalmia of the Scrofulous.

- β. Catarrho-rheumatic Ophthalmia and Catarrhal Ophthalmia.

- γ. Secondary Variolous Ophthalmia.

Division 3. *Keratitis* from *constitutional causes only*.

- α. Hereditary Syphilis.

- β. Primary Variolous Ophthalmia.

- γ. Rheumatism.

- δ. Septicæmia or Pyæmia.

- ε. Typhus, Scarlatina, Diphtheria, or deficient nitrogenous food.

- ζ. Aquo-capsulitis, Choroidoiritis, and Sclerotitis.

Of the 1st division, perhaps, some may object to the placing of the group γ under this head, especially with respect to the ophthalmia following measles, and I am willing to allow that possibly many cases of this form would be not inaptly placed in the second division, but the majority are of so trifling a nature when uncomplicated, and yield so readily to merely local treatment, that I am inclined to place the great bulk of them in the same group with purulent ophthalmia. Of this latter disease, as it is seen in infants and also in the gonorrhœal form, the effect of local treatment alone, is so marked, and the absence of constitutional symptoms so general, that it is impossible to avoid the conclusion that the irritating discharge is often the main cause of disease extending to the cornea. But my attention has been lately directed to a form of purulent ophthalmia in infants which is evidently connected with a syphilitic taint, and which is usually very destructive to the cornea, either causing sloughing and staphyloma, or a state of Xeroma, in either case completely destroying vision. These exceptional cases, therefore, would come into the second division, or possibly the third. In gonorrhœal ophthalmia again the marked effect of merely local treatment, and especially of powerful astringent lotions and injections, sufficiently indicate the local nature of the disease in the majority of instances, but I am not prepared to say that in some there may not be some more deep-seated inflammation which requires constitutional remedies; and Mr. Wordsworth has called attention to this fact, and has published cases illustrating this somewhat rare form of disease.

Of the group δ in the first division, the following case well illustrates the cause of its being placed there, and the treatment best adapted to such a form of disease.

Case.—A woman, 59 years of age, applied at Moorfields Ophthalmic Hospital on Nov. 4, 1863, with a perforation of the right cornea and a prolapsed iris, associated with which were the following conditions:—The right side of the face and anterior half of the right side of the head and the right half of the tongue were completely anæsthetic. The right temporal region was hollowed from wasting of the temporal muscle, and the mouth was drawn a little to the right side. She had a certain amount of muscular power over both sides of the face, and could close both eyes partially, but could not tell by her own sensations when the right eye was shut. The movements of the affected eyeball were somewhat limited in the outward, upward, and downward directions.

These symptoms had commenced four years previously with severe neuralgic pains in the right side of the head—the defective sight, and probably also the ulceration, had existed only two or three months before her admission. These phenomena evidently pointed to lesion of the 5th pair on the right side, partial palsy of the muscles of expression on both sides, but more so on the left, and lesions of the 3rd and 6th pair on the right side.

The treatment adopted consisted simply of keeping the lids closed by sticking plaister and a light compress, and under this plan the ulcer soon cicatrized.

I must refer to the last number of the Ophthalmic Hospital Reports for the account of three cases of paralysis of the fifth nerve related by Mr. Hutchinson. In one of these cases, though the anæsthesia had existed six weeks, the eyeball was not inflamed, and treatment directed to the cure of the constitutional mischief was so successful, that sensation on the affected side was completely restored. In a second case, rapidly destructive disease of the cornea, necessitating removal of the eyeball, was the result of the anæsthetic condition; and in the third, the ulceration which had commenced was arrested by the same means as had been adopted in the case I have related above.

From these cases I conclude that external irritation is the exciting cause of the ulcerative process, but that when once set up the defective nutrition of the part favours its continuance, and that the phenomena are analogous to the sloughing bedsores so commonly associated with paralysis of the lower limbs.

The group ϵ I have placed last, as comprising cases of considerable rarity. I have myself never seen inflammation of the cornea as the result of proptosis or exophthalmic goître, but a very remarkable case was reported from the practice of

Mr. Tatum, in the "Medical Times and Gazette" of January 23, 1864, in which sloughing of the cornea occurred from the exposure consequent on the protrusion of the eyeball, and from the enormously-increased intra-ocular pressure.

I have seen only one instance of keratitis associated with ectropium, and in that case, the lower lid being the one affected, and great distress being occasioned by the overflow of the tears, I slit up the canaliculus, and by this means allowed the tears to escape freely into the nose. The result quite answered my expectations, as the ulcer now rapidly healed, and the condition of the lower lid correspondingly improved.

In placing strumous ophthalmia in the same division with the catarrho-rheumatic and secondary variolous ophthalmiæ, I had regard to the fact that in each of these diseases there is a marked cachexia, at the same time that there is almost always a local source of irritation; and though I am not quite satisfied that the catarrhal form should also be placed in this division, yet I am quite sure that I have seen many cases of this disease in which merely local treatment appeared to be of little avail without administering tonics and aperients at the same time.

The *keratitis of struma* may appear under a variety of aspects. Of 36 cases of which I have notes, of ages varying from $1\frac{1}{2}$ years up to 25 years, 8 were 4 years of age and under, 13 were between the ages of 4 and 12 years, 10 between the ages of 12 and 20 years, and 5 were over the age of 20. In 18 only of these cases was there a marked strumous aspect, or disease, usually said to be of a scrofulous nature, associated with the affection of the cornea, such as enlargement of the cervical glands, discharges from the ears or nose, or tinea of the lids. The remaining 18 cases were placed in the same category, chiefly from the fact that the inflammatory affection of the cornea could not be attributed to any other cause than the strumous diathesis.

In three of these 36 cases there was some suspicion of hereditary syphilitic taint, either from the history or the aspect of the patient, and two of these were very obstinate and difficult to treat, but in neither of these three was there the peculiar interstitial deposit peculiar to keratitis of inherited syphilis.

I should remark that all the cases of which notes were taken were such as I considered likely to terminate by some amount of permanent impairment of vision, or else such as presented some features of peculiar interest. Many trifling cases were passed over, and with them possibly some of serious import.

I find from the analysis of these cases of ophthalmia in scrofulous patients in which the cornea was undoubtedly and strikingly affected, that the most common form of inflammation in this region was that of ulceration, the ulcers being for the most part small, superficial, sometimes round, but sometimes having the appearance of an irregular abrasion, and that they generally occupied the central region of the cornea. Next to this the most frequent form was that of a superficial cloudy condition of the epithelial layer. I am inclined, however, to the opinion that in reality this latter form is more frequent than any other, but that from various causes I have not been able to take notes of these cases. Both of these forms, viz., the superficial ulcer or abrasion and the cloudy opacity without ulceration, may run a very tedious and protracted course, but leave very little permanent damage to the cornea. They are generally associated with tinea of the lids, and more or less conjunctival inflammation and discharge.

The more serious forms of strumous keratitis are those in which pus is formed either in the layers of the cornea itself, or in the anterior chamber, or both, and these commonly occur in badly-fed children, and almost always terminate by sloughing of part of the cornea, prolapse of the iris, staphyloma corneæ, or shrinking of the eyeball. In these cases there is considerable conjunctivitis and a purulent discharge. Out of 36 cases there were three of this description, two of which terminated in the destruction of the eye and staphyloma, and one was saved by a timely paracentesis of the anterior chamber.

Another intractable and distressing variety is that accompanied by phlyctenules or vesicles of lymph on the margin or centre of the cornea. I believe I have seen this go on to penetrating ulcers in two instances, and in three others the phlyctenule has left behind it a vascular and highly irritable form of ulcer. Four out of the 36 cases were of the phlyctenular variety, associated with great irritation of the bowels and diarrhoea, and followed in three out of the four instances by vascular ulcers. In two other cases vascular ulcers were present, but whether preceded by this particular form of keratitis it was not possible to determine, owing to the late period of the attack at which the patient applied. These cases are generally associated with great irritability and intolerance of light, and require a peculiar treatment, to which allusion will be made subsequently.

In cases of long standing, and associated with a granular condition of the conjunctiva of the lids, inverted eyelashes, or entropium, it is not uncommon to find a rough vascular

state of the cornea, a state of things most difficult to deal with.

In all but four of the cases noted, *photophobia* was a prominent symptom. Of the four exceptions, two were only under observation for about a month, and another was a case of somewhat doubtful nature with regard to the strumous or hereditary syphilitic diathesis. I think that intolerance of light is all but a universal symptom in keratitis as it occurs in strumous patients—when the keratitis has been subdued and the disease is only manifesting itself by conjunctivitis or ulcerations of the margins of the lids, it is very common for all intolerance of light to disappear.

Special allusion will be made in a subsequent page to the treatment of vascular ulcers, granular lids, and to the best method of relieving intolerance of light.

Catarrho-rheumatic Keratitis.—A second form of corneal inflammation, depending partly upon local and partly upon constitutional causes. It is contrasted with strumous keratitis by selecting the middle-aged or aged for its victims, and generally the most debilitated people suffer from this form of disease. I do not think that it is necessarily connected with a rheumatic diathesis, but is always associated with a low, enfeebled state of general health. Out of 140 cases of keratitis, of which I have notes, nine were affected by this form of the affection. It commences as a severe catarrhal inflammation, accompanied by scleritis, with mucopurulent discharge from the lids, and racking circumorbital pain, which is aggravated at night. The cornea may be affected by ulceration, which takes the form of a large, ragged, irregular excavation, sometimes perfectly transparent, or by effusion of pus between the layers, and probably in the anterior chamber at the same time.

There is decided tendency for catarrho-rheumatic ophthalmia to recur and (where the pupil has become closed by adhesions) to a glaucomatous condition being induced. Several instances of this kind have come under my observation, in which after the subsidence of the first attack, probably with a dense leucoma of the cornea, or of part of it, there has been a return of pain, the eyeball has become tense and injected, and this state of things has either persisted in spite of treatment, or has subsided only to recur again and again. In such instances iridectomy affords the best prospect of a successful cure, or at any rate of relief of the pain and tension.

Nine cases of *Secondary Variolous Ophthalmia* occurred in 140 of the noted cases of Keratitis. These cases were published in the "Medical Times and Gazette," of April 2nd, 1864.

The period that elapses between the eruption of pustules on the body and the appearance of the corneal inflammation is sometimes as long as seven or eight weeks, during which time, however, there may be, and generally is, a copious conjunctival discharge. The most frequent period is about three weeks from the commencement of the small-pox fever, at the time when the crusts are ready to fall from the body, and when the process of elimination of the variolous poison might have been supposed to be complete. However that may be, it is certain that in a given proportion of cases the cornea becomes very violently inflamed, and the remarkable condition termed onyx, a circumscribed deposit of pus in the layers of the corneal tissue, is very apt to be induced.

Of the varying results of treatment in such instances, the following three cases are good illustrations:—

I.—A man, 40 years of age, a farm labourer, and apparently in robust health, had a large onyx and deposit of pus in the anterior chamber, after a very slight attack of small-pox. Ten months after he was just able to pick out letters of the largest type (No. 20 Jaeger's Test Types), and there was a double pterygium encroaching on the cornea.

II.—A little girl, $4\frac{1}{2}$ years of age, two months after having gone through the measles, took small-pox, with which she was marked when I saw her four months afterwards. She then had a staphyloma, occupying part of the cornea, which was nearly opaque in the rest of its area. She was under treatment for three months, and at the end of that time could still only just see the shadow of my hand between her and the window.

III.—A working engineer, 31 years of age, noticed his left eye became inflamed a week or ten days after the small-pox had come out. An onyx formed, which, after treatment of three or four months, left only a faint nebula, and allowed him to read small print (No. 2 Jaeger).

NOTE.—For the opportunity of observing and taking notes of cases at Moorfields Ophthalmic Hospital, I have to tender my acknowledgments to Mr. Wordsworth and Mr. Hulke, who have most kindly placed at my disposal a large number of cases of inflammatory affections of the cornea.

(To be continued.)

On Spontaneous Gangrene connected with Disease of the Heart and Great Vessels. By JOHN COCKLE, M.D., Physician to the Royal Free Hospital.

(Concluded from page 324.)

IN the preceding part of this paper it was hinted at as singular,—considering the long known fact of the occasional occurrence of spontaneous gangrene in diseases of the heart and great vessels, the speculations of Senac,* and the direct statement of Peter Frank,—that the great cause of the affection, viz., plugging of a principal artery by some wandering clot, was not discovered at an earlier period.

If the reader were to refer to the fourth letter of Alexander's translation of Morgagni (section 23), he would find that the surprise expressed was, to a still greater extent, justified. The remarkable view given there by Nymmannus respecting polypoid apoplexy—the true key to Embolism†—acquires increased interest, when taken in conjunction with the subsequent experience of *Testa*.

This distinguished physician died (1814) before he had completed his classical work "On Diseases of the Heart." But, in the volumes published (although the author was unaware of the embolic nature of the lesion) he states how frequently, in diseases of the heart, he had found death to result from failure of the mental powers and coma associated with plugging of the vessels of the brain by polypoid concretions, ". . . i vasi in altri sogetti furono pieni di coaguli poliposi *tenacissimi*; la quale specie di apoplessia poliposa mi è paruta nei cadaveri dei cardiaci apoplettici da me incisi una delle più frequenti."‡

In the second volume of his work *Testa* illustrates this general statement by the detail of a case of interest in reference to the subject. It must, however, be borne in mind that the cases described were too rapidly fatal to allow the phenomena of softening and gangrene of the cerebral tissue to supervene.§

* By a singular inadvertence, the name of *Portal* was, in the former part of the paper, substituted for that of *Senac*. To the last-named author reference was intended.

† " . . . If concretions of that kind (polypi) brought from the heart to the arteries be, by chance, broken from any violent commotion of the blood, and by the impetus be driven upwards, they must, of consequence, come to more narrow passages, that is to the parts of the carotid and vertebral arteries, which will not yield, and so will, of course, stop up every way of access to the brain." - Op. cit.

‡ Vol i, capo. vii.

§ Altri, nei quali i polipi furono veduti riempire le cavità del cuore,

FIG. 1.

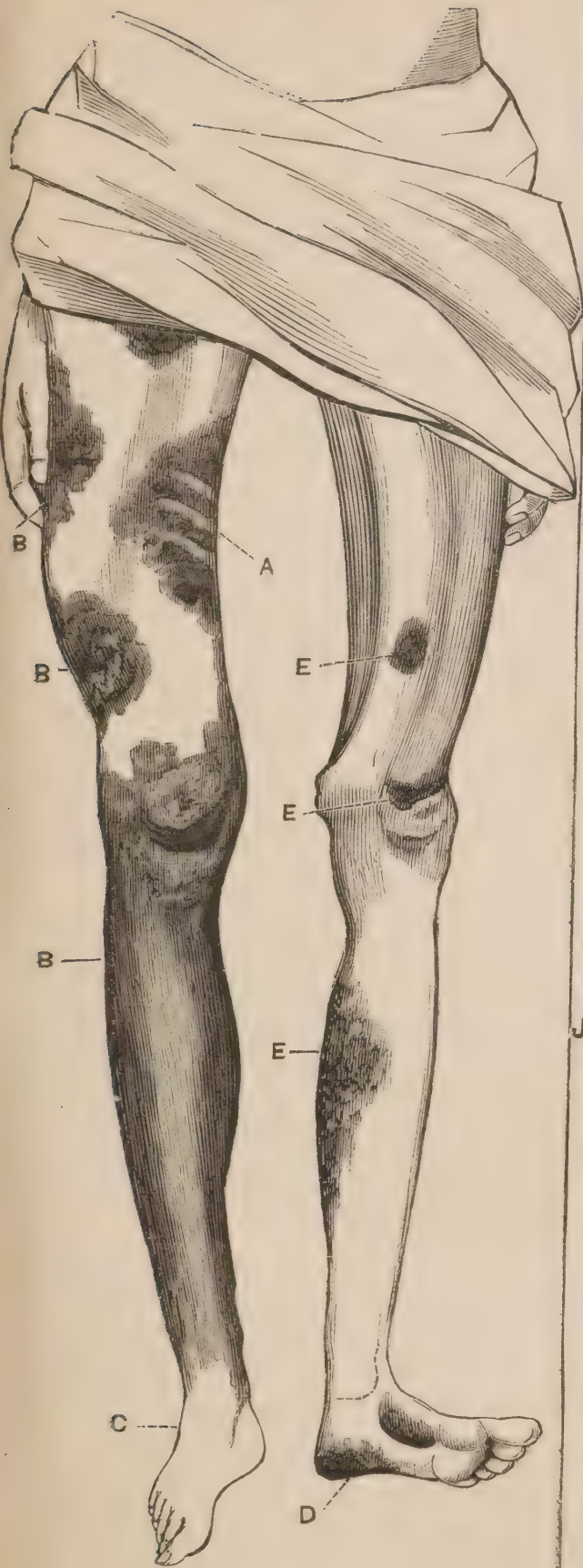
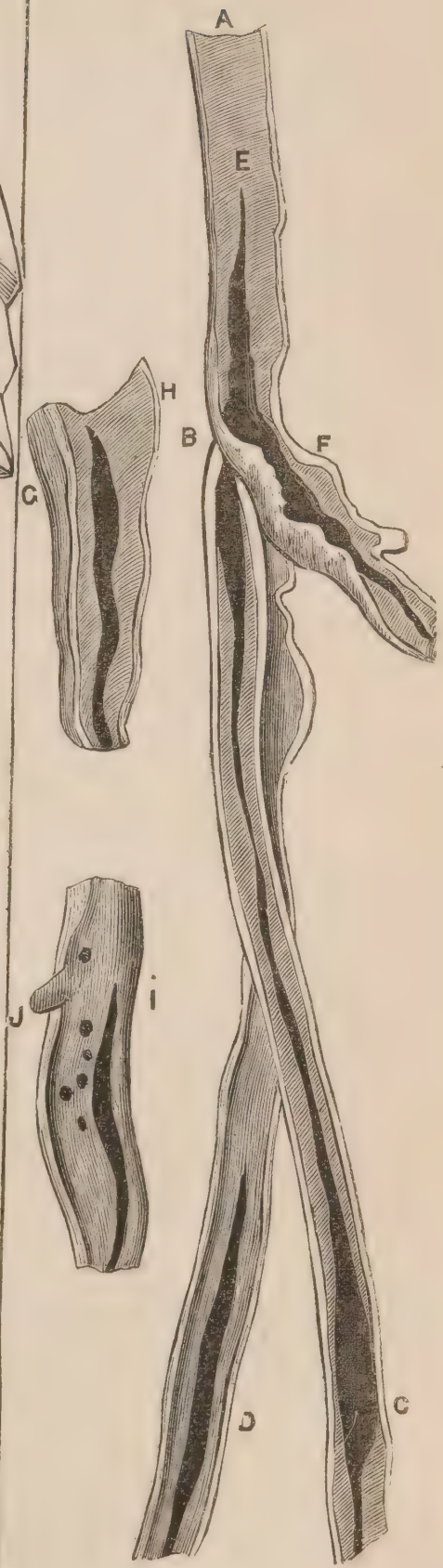


FIG. 2.



It was not, however, until the year 1827, that the almost direct anatomical proof was obtained by Legroux, of the production of spontaneous gangrene from the obliteration of an artery by a detached concretion from the valves of the heart. Allibert,* in his valuable thesis, has quoted these cases, and details a third, in which the plug seemed evidently formed of the same material as that constituting the concretion in the heart.

The monograph upon Spontaneous Gangrene, published by François, in the year 1832, contains by far the most extended researches upon the subject, and includes most of the extant cases.† Indeed, this work is still of the utmost value to those desirous of thoroughly investigating the clinical and anatomical history of the affection. François was fully aware that concretions, primarily formed in the heart or great vessels, might become detached by the column of blood, and finally arrested in some narrower portion of the vessel. “D’autre part ce qui se passe alors dans la trachée-artère et le larynx, ne peut-il se produire soit dans le cœur, soit dans les artères phlogoses, c’est-à-dire des pseudo membranes ou même des caillots formes dans le cœur, ou dans une partie de la continuité des conduits vasculaires artériels ne peuvent-ils pas s’en separer, enlevés qu’ils sont par la colonne de sang, et ne s’arrêter que là ou leur calibre est trop rétréci pour leur livrer passage? Il est très apparent que les choses se sont passés d’une de ses manières chez les sujets des observations 3 et 21.”

The main object of the various quotations made, has been simply to render justice to those pathologists whose opinions have been nearly or altogether unnoticed in comparatively recent contributions, dealing with the literary history of spontaneous gangrene, and its antecedent phenomena. Such opinions in no wise detract from the merit justly due to Virchow, and the observers in this country. They have, by their own observations, invested the entire subject of embolism with a renewed and practical interest, and succeeded in giving to this affection a fixed and definite position.

terminarono la vita comatosi e letargici, quale fu el morire dell’Agata Magagnoni Bolognese ; nel cui cadavere comparvero i vasi delle membrane del cervello e dei plessi coroidei gonfi e tutte pieni de coagule poliposi biancastri, e il cuore e l’aorta molto dilatati, e quest’ ultima, e l’uno e l’altro dei ventricoli, pieni de coagule sanguigni senza nessun attacco et de piccola mole.—Op. cit., vol ii, p. 119.

* Recherches sur une occlusion peu connue des vaisseaux artériels, considérés comme cause de gangrene.—Thèse de Paris, 1828.

† Two cases of sudden arrest of the circulation in the brachial artery, of very unusual clinical interest, will be found in 1st and 3rd vols of Lentin’s Beitrage, headed “Gangrenus Spontaneus,” and “Herzlähmung der arm-pulsader.”

‡ Op. cit., p. 200.

The following contribution to the pathology of spontaneous gangrene from *embolia*, offers many points of interest.

Alice Fennell, æt. 41, needlewoman, had been under my care upwards of eight years, formerly at the City Dispensary and latterly at the Royal Free Hospital. On referring to the original notes taken during the time she was a patient of the City Dispensary, I find that she was first seen after a severe attack of rheumatic fever, which had disabled her for three months. The ordinary physical signs of insufficiency of the aortic valves, and of enlargement of the heart, were well marked. From the pain suffered during the attack, in the cardiac region, and the scars here left of leech bites, it is probable that the pericardium had also been implicated. About three years later, she had a second attack of rheumatic fever, and a third six months subsequently. The last attacks, though less severe than the original, were still attended with considerable cardiac pain and excitement. Although no further notes of the case were taken until her admission into the hospital, it does not appear that any other decided attack of rheumatic fever had occurred. But she was frequently under treatment for pains in the chest and joints, and she almost habitually suffered from cough, dyspnoea and palpitation of the heart. The menstrual periods were, generally, excessive. There was a gradual loss of flesh and strength, the complexion became sallow, the lips livid, the eyes suffused and prominent, and the expression very anxious and melancholic. The double murmur over the aorta, and the increased impulse of the heart and arteries, though occasionally varying in point of intensity, were persistent.

At the date of her admission as an in-patient of the hospital, March 22, 1864, she was apparently again suffering from symptoms of acute rheumatism, viz., pains in the knee-joints, increased during attempts at movement, tongue coated, thirst, profuse perspirations, copious eruption of sudamina over the chest and abdomen. The countenance was dusky the expression anxious, lips livid, respiration hurried and labouring, the pulse quick and jerking, 120 per minute; the heart's action was embarrassed, and a loud double murmur was audible at the precordial region, and particularly over the origin and course of the aorta. The urine was free from albumen, but contained a large quantity of urates and purpurates.

March 23.—The patient complained of most excruciating pain in the knees (more particularly in the right) extending to the toes. On examination, the knees were neither red nor swollen, and felt, comparatively, cold.

24.—No abatement of the violence of the pain in the knees; entire absence of sleep; face alarmingly anxious; breathing much distressed. Several large livid patches were observed upon the right thigh. The right leg and foot assumed a tallowy whiteness, and the temperature was very much lower than that of its fellow.

25.—Pain in the knees, still excruciating. Perfect anaesthesia of the right leg, and loss of motor power; to use her own expression the limb felt quite numbed and heavy. This extremity was as pallid and cold as that of a corpse; it was, in fact, precisely in the condition described as “cadaverization” by Cruveilhier. No arterial pulsation could be felt, excepting immediately below Poupart’s ligament. So emaciated was the patient, that the slightest beat would have been detected. Ash-coloured digitations were now visible over one livid patch in the thigh. Slight livid patches were seen upon the left extremity, two, very small, were observed over the thigh and patella; others, also, over the anterior aspect of the leg and the plantar surface of the foot. In this latter situation, the skin became quite black, and the cuticle subsequently becoming detached, two blebs of large size formed, and filled with sero-sanguineous effusion, one under the heel, the other on the ball of the great toe. The pain in this limb, although severe, was by no means so intense as that in the right, neither was the loss of sensation and motion so complete. Slight pulsation could be felt in the left femoral artery, but none in the popliteal space or tibial arteries. On the following morning, Mr. Hill observed that the right leg had become completely livid. The pain had somewhat diminished in intensity. No great change beyond reduction of temperature was observed in the left leg. 24 hours later, the breathing became very quick and labouring (48 respirations per minute), and moist râles were audible over the bases of the lungs. The pulse became smaller and weaker, 130 per minute. Eventually the countenance became very dark, the lips intensely livid; the breathing gasping. The patient began to wander, and died in a state of asphyxia.

Autopsy 24 hours after death. Body extremely emaciated. The discoloured appearance of the inferior extremities remained much the same as during life.

Chest.—Old adhesion of the lower third of the right pleura; the upper portion of the surfaces were separated by moderate limpid effusion. General adhesion of the left pleural surfaces to each other and to the pericardium. The lungs were congested, generally, and the tissue much condensed at their bases.

Heart.—The pericardium was universally adherent, the

result of former disease, as there were no signs of recent pericarditis. The heart was greatly enlarged and dilated, particularly the left ventricle, its walls being one and a half inches in thickness. The mitral valve was thickened, but not otherwise diseased. The semilunar valves of the aorta were greatly thickened, and incapable of accurate closure, but their surface was entirely free from vegetations. The ascending aorta was dilated and much diseased, extensive atheromatous change existing. This portion of the vessel contained a clot of considerable size, partially decolorised, but not of any remarkable density. A moderately firm coagulum also existed in the pulmonary artery.

Abdomen.—The liver was large, elongated, and deeply indented across its surface, evidently the result of former tight lacing. The stomach and spleen were displaced, the former organ dislocated quite into the hypogastric region. The kidneys were congested, but not otherwise diseased; no other morbid appearance of the viscera presented. The abdominal aorta contained no clot, but on dissecting downwards, the right femoral artery, just below the groin, was distended, and resistant to the touch. A very firm, dark brown plug was here found distending the artery. It was about an inch in length, commencing directly above the origin of the profunda, cone shape above, while below the plug terminated in a mere film of fibrine, extending down to the popliteal space, where it again enlarged and terminated. In both situations the plug is connected by delicate vessels to the wall of the artery. The coats of the femoral artery, corresponding to the plug, are thickened and congested, probably the mere result of the pressure of the plug, as the walls immediately above and below are perfectly healthy. No coagulum existed in the corresponding portion of the right femoral vein, lower down, however, a coagulum was found, commencing from the junction of the venæ comites of the anterior and posterior tibial vessels, and extending to the upper part of the popliteal space. A plug of fibrine, similar in consistence to that found in the right femoral artery, extended from the lower portion of the left external iliac to the femoral artery near the origin of the profunda. This latter plug only partially occluded the vessel. In the left femoral vein, opposite the artery, a coagulum existed.

Remarks.—The case detailed is interesting in several particulars. The intense pain in the knees, and the character of the symptoms occurring in a patient, who had frequently suffered from rheumatic fever, rendered at first the supposition of a renewed attack highly probable. But the fact of the diminished temperature of the extremities, more particu-

larly that of the right leg, combined with the absence of redness and tumefaction of the joints, are points especially worthy of notice, and threw an early doubt over the exact nature of the malady. The comparatively speedy appearance, however, of livid patches over the surface of the extremities, and the coldness, pallor, and numbness, augmenting at a time when the pain was still excruciating in the knee joints, led to a careful examination of the arterial circulation. The entire absence of pulsation in the right femoral artery, the very faint pulsation in the left femoral, and the absence of pulsation in the left popliteal space, taken in combination with the long standing cardiac disease, rendered the diagnosis of *embolia* a matter of comparative ease. It is highly probable, considering the entire freedom of the aortic valves from vegetations, and the absence of definite concretions from the left cavities, that a portion of the coagulum formed in the diseased aorta, under much cardiac disturbance, had become detached, and, from its large size, carried downwards by the main column of blood, as far as the bifurcation of the aorta. Here the clot must (on this view) have again become unequally divided, one portion passing down and completely obstructing the right femoral artery, and the other portion partially occluding the left external iliac and upper part of the left femoral arteries. It is true that the arterial plugs differed, both in respect of consistence and colour, from that composing the clot in the aorta, but their greater condensation and darker tint was, probably, the direct result of the pressure and other changes to which they were submitted. The thickening of the coats of the right femoral artery (already alluded to) corresponding to the plug was, also, probably the direct result of pressure of the latter upon the *vasa vasorum* and the irritation thus set up. Such irritation may, also, explain the partial organic connection between the plug and the arterial walls. This connection is still well shown in the preparation, and certainly leaves yet open the question respecting the changes which the lining membrane of an artery may undergo. This view is rendered probable from the normal condition of the vessel above and below the site of the plug. Simple blood-staining of the walls was the only change existing. The special tendency of the blood to coagulate in such a marked rheumatic diathesis, must, however, be borne in mind. Another most interesting point in the history of the case is the persistence of the violent pain in the right knee, at a time when the limb was in a state of general anæsthesia of the surface and all power of motion was lost. Such a condition marks the distinction between *anæsthesia* and *analgesia*.

EXPLANATION OF THE ENGRAVING TO ILLUSTRATE
DR. COCKLE'S PAPER.

FIG. 1.

- A. Ash-coloured Digitation in Livid Patch.
- B. Ecchymosed appearance from Cutaneous Obstruction.
- C. Tallowy-white appearance of the Foot.
- D. Elevation of Epidermis containing Bloody Serum.
- E. Livid Patches on the Left Leg, corresponding with a similar condition on the Right Side.

FIG. 2.

- A. Termination of External Iliac Artery and commencement of Femoral (right side).
- B. Femoral Artery and Profunda Artery given off at this point.
- C. Popliteal Artery.
- D. Popliteal Vein.
- E. Commencement of Plug obliterating the Vessel.
- F. Profunda Femoris.
- G. Left External Iliac Artery and upper part of the Femoral Artery.
- H. Origin of Circumflexor Ilii Artery.
- I. Femoral Vein (left side).
- J. Saphenous Vein opening into Femoral Artery.

(The figures are engraved from drawings taken by Mr. C. D'Alton, Pathological Artist to the Royal Free Hospital.)

On Alopecia, or Falling of the Hair: its Varieties and Treatment. By J. MILL FRODSHAM, M.D., Edin., Physician to the St. John's Hospital for Diseases of the Skin, and Senior Physician to the Farringdon General Dispensary.

UNDER the name alopecia, I intend to include the total, or partial falling of the hair, or the beard, from all causes. It will be more convenient in considering this subject, to divide it into the two great heads of simple and compound; by simple, I mean the falling of the hair naturally; that is to say, without external manifestation of disease, and without any apparent morbid constitutional cause; and by compound, that associated with a morbid condition of the economy of the hair and skin.

Under the former term I include the following forms; viz. :—

Congenital, accidental, senile, circumscripta (porrigo decalvans of Willan). Under the latter various local diseases of the scalp, as chronic eczema, impetigo, pityriasis, tinea tonsurans, tinea favosa.

Congenital alopecia (alopecia connata) is very rare, and is generally partial, according to Dr. Burgess always so; ex-

amples are sometimes met with when children are born without hair on any part of the body, and which is never afterwards developed; consequently, as age advances, they have neither beard nor whiskers. These infants have white and dull skins, the eyelids are red, generally the hairy skin is not absolutely devoid of hair, but shows itself as a down which falls off after a time and is not reproduced. Dr. Burgess relates a case in which this took place at the age of four. These infants seldom acquire vigorous strength, and generally present the attributes of weakly lymphatic subjects, with feminine voice.

Senile alopecia (calvities) more correctly an infirmity than a disease, shows itself generally on the head; it is seldom or ever that the beard or eye-brows are affected, usually the crown of the head is the point where the loss first commences, and it extends forwards and backwards. It is seldom or ever that the sides or back are affected. It may extend over the whole scalp, but cases are very rare where the latter is quite denuded. In this form a general atrophy of the integument takes place, characterised by diminution of the thickness of the skin and smoothness of its surface, atrophy of the sebaceous follicles causing the skin to become dry and smooth, giving it soon a yellowish tinge.

To this type also belong all cases of premature baldness, whether in youth or middle age. This form depends especially on the congenital organization, and may also result from a vicious mode of life, laborious mental occupation, and a nervous temperament. Accidental, this form results from disorganization of the parts covered with hair from injuries, such as wounds, burns, &c.

Alopecia circumscripta, described by Celsus under the name of *area*, by Cazenave *alopetia circumscripta*, and by Willan, *porrigo decalvans*. The hair in this variety falls off in circular patches, leaving a spot of ivory smoothness. There is no irritation of the skin, no pain or previous symptoms. It is not contagious, and is more frequently seen in women than men. The relative proportion, according to Mr. Naylor, being 7 to 4.

Various causes have been assigned for this form of disease. According to Wedl, the sebaceous follicles are absent, whilst the excretory ducts of the sudoriparous glands and the latter themselves may remain. Von Barunsprung considers it due to loss of nervous power, but admits that the hair bulbs are atrophied, but conceives this to be a secondary result, by paralysis of the trophic nerves. Mr. Naylor states this disease is often associated with headache, especially in women, also with some disorders of the catamenia, and in children with

ascarides, or gastric irritation. He also found the hair bulb reduced to a slender and brush-like filament. Mr. Erasmus Wilson strongly supports the view of nerve influence.

Dr. McCaul Anderson considers this disease to be occasioned by a fungus, and to be contagious. Mr. Hutchinson also considers it contagious, also M. Hardy, Bazin and Tilbury Fox.

Mr. Startin, out of a large number of cases he examined, failed to detect any fungus, as also Dr. Plumb. Nor is its existence borne out by the researches of Wagner who cut out a small piece from the scalp of a girl about eleven years afflicted with complete alopecia. He states that the epidermis, rete malpighii, corium and hair follicles were normal. This disease has been described according to its various forms and duration, under the names *sparsa*, *diffusa*, and *inveterata*. This variety is also common among the lower animals, especially the dog, mouse, and horse.

I have hesitated whether to class this among the simple or compound form of alopecia, but have chosen to consider it among the former, as my own experience teaches me to regard it as independent of any known local or constitutional morbid cause.

Of the compound form we may first mention those from constitutional causes, syphilitic alopecia. This, like the senile, usually commences on the crown of the head, but with this difference, that whereas in senile the hair falls partially and generally in the same place, viz., top of head, in this form the hair falls off entirely, and may affect the whole head and body. The parts least liable to be affected are the whiskers and pubes. The hair loses its brilliancy and becomes thin and dry from insufficient nutrition of the skin. It has little tendency to general or patchy baldness, but rather to thin the hair. There is never any coexistent irritation or ulceration—it is temporary.

Secondly, from fevers, accouchment, &c. In these cases the bulb is always present and fully developed. The baldness is rather the consequence of long confinement, which causes great weakness and prevents that care and attention so necessary to the health of the hair.

Alopecia from various local diseases of the scalp. In this variety we must consider first those cases in which the hair falls as the result of inflammatory processes, the loss is temporary and never permanent. It may be caused by chronic eczema or impetigo. In the former it always occurs when the disease is in its third stage, *i.e.*, *furfuraceus*, when it assumes a dry red, scaly form. This is sometimes very difficult to diagnose from pityriasis, but the scales are thinner, drier, more

friable, and softer. When they fall off the skin does not present, as in pityriasis, a smooth, red, and elevated surface, but fissured. Impetigo may occur in two forms, the simple and contagious, viz., the pustule on an eczematous base, and the pustule simple. In the other forms of this variety, the hair itself, by being diseased, adds another complication, as in pityriasis, *tinea tonsurans*, *tinea favosa*.

The appearance presented by pityriasis is that of a number of very fine bran-like scales. It is difficult to diagnose from eczema and psoriasis. It is a slightly furfuraceous desquamation, on a dry and scarcely inflamed surface. It never forms crusts, whilst in eczema large squamæ cover a red, inflamed, and fissured surface, and besides, vesicles are reproduced in the surrounding parts. Pityriasis is recognised by its prominent and inflamed plates covered with shining squamæ, larger than those of pityriasis (Gibert).

Tinea tonsurans (true boarding-school ringworm) is characterised by one or more bald patches, with little elevations, caused by the swollen roots of the hair, and dryish grey scales of epidermis covering the skin, and accumulating in quantities round the elevation. This is the effect of the parasite which is formed in the root of the hair itself.

Tinea favosa presents a surface covered with little cup-like depressions, of a sulphur yellow colour, with a hair projecting from each centre. These may be very isolated, or cover the whole scalp. The anatomical seat of the parasite is the depth of the hair follicle, which forms the inner root sheath of Kolliker. Fortunately this form is never presented to us in private practice, and seldom in public. I have omitted *plica polonica* because it is never met with in this country.

In all these forms, with the exception of favus, the falling of the hair is but temporary, the bulb having been, more or less, deprived of its normal nutrition. When the disease of the skin or hair terminates, it soon regains its former life and strength, and grows in proportion as the disease has been long or short.

In considering the treatment of alopecia we must remember that with the exception of the senile, which is incurable, the organs that secrete the hair are merely in a state of atony, and not destroyed; and, therefore, the main feature of the treatment must be to excite capillary circulation of the scalp, and thereby alter the vitality of the hair follicles. When the hair falls prematurely, as is especially seen in women, great care should be taken to find out the causes, among which may be enumerated: doing the hair too lightly, constantly in the same way, seldom undoing it, allowing the skin to become obstructed by the constant use of resinous pomades,

etc.; also from want of æration, as constantly keeping the head covered. That resulting from accouchement and fevers has the additional complication of the rancid perspiration and local irritation of the pillow. These causes will themselves naturally suggest the treatment which must be conducted on general principles, not neglecting local treatment. Much benefit will result from cold bathing the head, altering the mode of dressing the hair, allowing it to hang loose about the body. When the skin is unable to have free power of secretion from the too abundant use of pomades, etc., the head should be well washed with the yolk of egg, or borax in almond emulsion, afterwards carefully rinsing with warm water, and to apply the following lotion, viz., spirit ammon. aromat., tinct. canth., glycerin, aa. ℥ss., aquæ rosæ, ℥vi. M.

A useful form of stimulating application is made by adding equal parts of the tinct. canth. of the P.D., and scented lard of the lin. canth. of the P.D.

In the form I denominated alopecia circumscripta, we require a purely stimulating treatment locally. The parts should be first well cleansed with benzole (startin), and after the liq. vesicatorius of Messrs. Bullin and Birt applied with a hard, short brush, or the tinct. iodinii, twice the strength of the P. L. When the effects of these have passed away, one of the following ointments may be used: sulphur, 3ss; hyd. nit.-oxyd, gr. v.; hyd. ammon.-chlor., gr. v., combined with a few drops of creasote, and an ounce of lard. The internal remedies most to be relied upon are the mineral acids. A favourite form of mine is R̄ acidi hydrochl. dil. ʒiss: acidi nitrici dil. ʒi. æth. chlorci ʒi: inf. gentian.-comp. ʒviiij M. Fiat mist. cujus sumantur cochl. magn. ij. ter die.

I may here state the curative effects of these agents greatly depend upon their mode of application, which should be as follows: the hair, previously well washed, should be parted in straight lines, and the ointments or lotions applied by means of a hard brush to the skin, so freed until the whole of the scalp has been thoroughly gone over. In syphilitic alopecia the best internal treatment is the biniodide of mercury in small doses (potass iodidi q. ij. liq. hyd. bichloridi ʒj aquæ ʒi), and the local application at first should be some of the mercurial ointments before mentioned, and afterwards, if necessary, the blistering fluid of Bullen and Birt. In the alopecia resulting from chronic skin eruption—as eczema, impetigo, and pityriasis—our first object must be to cure the local disease. For this purpose an ointment, composed of the pyrolignous oil of juniper (huile de cade), sulphur ointments, zinc, and creasote lotions, should be used. Arsenious acid, with or without iron in the dose of $\frac{1}{30}$ of a grain, is the best

internal remedy for these forms. It requires to be taken for at least a month, and it is, therefore well to prescribe it ʒj doses. If the eczema or pityriasis is confined to one spot, and resists treatment, recourse should be had to local blistering.

In the case of tinea favosa, tinea tonsurans, the bulb of the hair becomes modified from a parasite. It is most important to cure the local disease as quickly as possible, as in this the alopecia is permanent and extensive in proportion to its severity. In favus all internal remedies are useless and inconsistent, epilation lotions of bichloride of mercury and sulphur and tar ointments are to be used. This disease will seldom come under your notice, but tinea tonsurans very frequently. To cure it we must frequently have recourse to epilation and afterwards to the blistering fluid, or the tinct. of iodine, or bichloride of mercury lotion, or ointment composed of sulphur and creasote. By these means I have often cured the most inveterate forms. In pityriasis the creasote ointment and zinc lotions are the best treatment.

In epilation, care should be taken to have a proper pair of pincers, to hold the hand low down, and epilate in the natural direction of the hair, a proceeding which in this way causes little or no pain.

In all these forms the head should never be shaved. If required, the hair may be cut short around the diseased spots to admit of the more efficient application of the remedies prescribed.

The ninety-first Anniversary Oration, delivered before the Medical Society of London, March 8, 1864. By J. L. W. THUDICHUM, M.D., M.R.C.P., etc.

MR. PRESIDENT AND GENTLEMEN,

WE are assembled to celebrate the ninety-first birthday of the Medical Society of London. Such great age is eminently a matter of congratulation to individuals no less than to corporate bodies. But to you, Sir, as the individual expression of the life of the Society, it must be doubly grateful to bear such high honours already in the hey-day of your existence, when, with strength and wisdom at their highest, you are able to encourage what may be good in our wishes, or to modify the extravagance of our joy. On our part also the occasion calls for twofold gratitude; once because it gives us the opportunity of being thankful for a life accomplished; and, secondly, because it contains in itself the guarantee of a continuous future existence.

The Annual Oration was appointed to give expression to such feelings, and by pointed argument to raise them to a conviction. It could not on this occasion swerve from the appointed line or overreach the mark placed by so many laudable precedents. It had to be a commemoration, a reminding each other of what seemed worthy of note amongst our successes or our duties. But it had also to be a celebration in form and spirit or an expression of thoughts and feelings which animate us all when we lay aside the clouts of our working attire, and take a walk in the gymnasium.

Such an errand should be refreshing to us all. To make it so requires but an effort of the imagination. Let the blue sky open above us, and the sea-borne breeze convey the fragrance of the hyacinth; listen to distant waterfall and nearer nightingale; let our eyes bathe in the golden warmth of the sinking sun. Let our souls travel beyond. Aye! in the moment you wish for wings you have them, and try them in the unaccustomed element. With great spirits for our pilots we sail through the ether of our supernatural existence, while our lungs breathe and our voices stir the air of the terrestrial spot which supports our bodies.

The ether of our existence is that emanation from God, which we term reason. By means of it we recognise things and their order, and obtain the insight into natural laws, so as to enable us to employ them for our benefit and instruction. Reason in itself can never fail of its object, so long as the senses are healthy and the objects in themselves are pure; so long as the moral side of reason, namely, conscience, is maintained in its place. But reason has two enemies by which it is frequently set aside in common life, and these are fallacy and evil.

We are unanimous in our endeavours to escape the fangs of both. For the avoidance of the greater danger the way was happily marked out for us. But the escape from fallacy seems at first sight less easy, seeing that no special method of thinking and acting has ever taught how to avoid fallacy in the recognition of natural things. Fallacy is the child of preconceived opinion. Preconceived opinion is the pretended assumption by man of godly attributes which he does not possess. Man has no fore-knowledge. Even when he only affects to have any, as for instance when he puts the thesis which he wants to try by experiment, he runs a much greater risk than by the exercise simply of his observing powers. For in the former case he professes to know the conditions of an operation of which he wants to observe the effect, and to bring both into some relation to each other, which is a much more complicated process than that which results in simple

observation. Knowledge then being the result of observation only, it follows that all opinions formed before observation have no foundation, as is indeed further proved by comparison of such preconceived opinions with the results of actual investigation. There was a time when a system of preconceived opinions, termed philosophy, could be praised by the best of men, and receive such eulogistic names as world-wisdom. Of such systems there have been many in succession recommended to men, but they have never eased their pains, augmented their means of subsistence, or increased their virtue. "Water," says Schelling, "contains carbon and nitrogen, and so does iron. But while water contains these substances in relative, iron contains them in absolute indifference." In another place he says, "The animal decomposes the iron, the plant the water. The female and male sex of the plant is the carbon and nitrogen of the water." When this was said inductive philosophy was highly praised as a separate and infallible method. But now the term philosophy has become a by-word. It is seen that there cannot be different methods for the recognition of natural things, that the very word *methodos*, without any modifying epithet, signalises the process which the mind has to adopt to arrive at the goal of its never-flagging desires; that truth is only obtained by going after it, and by following its traces to the limits of human possibility.

From the time that the recognition of this truth began to penetrate the leading classes in the European communities, the import and usefulness of natural sciences rose very quickly. They had before achieved their results, in silence almost, and without controversy with the dominant philosophical schools. These schools now collapsed, being reduced *ad absurdum* on every arena. The year 1848 saw their last disciples fail on the platform and in the council-chamber, and prove that the principles and practice of good government can as little be excogitated in a lecture-room as the prevention of small-pox by vaccination can be invented in an anatomical museum. Reason condemns the dogma of every kind as liable to enchain the mind of the unwary, and to hinder development. Dogmatism, therefore, had no greater enemies than the great exponents of reason, Kant, and in our days John Stuart Mill. The distance which separates these men, marks the progress we have made. The most striking illustrations of the operations of logic in the work of this latter author are derived from the method of investigating natural phenomena, which has led to the discovery of the explanation of the process of respiration. The laws which govern the human understanding cannot contradict the laws which

govern the process of respiration, but the deduction of these laws can be made in the strictest accordance with the rules of the human understanding. And this is the case with every natural phenomenon, and never otherwise, and therefore we reject as untenable accounts of alleged natural phenomena which are in contradiction to the rules of the human understanding, or preconceived opinions which are in contradiction to well-ascertained natural phenomena.

This discipline has been administered for ninety-one years by the Medical Society of London. Faithful to its mission of increasing the store of medical knowledge at large, and facilitating its acceptance by individuals, it has seen the sands of schools shift hither and thither, it has seen some of its members swayed in the direction of the leaning of schools and doctrinal coteries. But as a body it has always upheld the principles and the practice of Hippocrates and Sydenham, of Galen, Vesalius, and Morgagni, of Harvey and Jenner, of Aristotle, Kant and Mill. It has done so with that amiable tolerance, which bears up with the foibles of individuality, and conciliates antagonistic elements. But it has never compromised its essential principles by coquetting with tendencies in vogue or fallacies in favour. It has found strength in consistency, and its adhesion to an unchangeable principle will secure to it not only the gratitude of those who have been benefited directly, but also the regard of that wider circle who have been and are the ultimate recipients of the benefits that accrue from its transactions. But above all, this adhesion will be its safe-guard in the times of storms of opinion, and the guarantee of its continuance in the future, until such a time when the purposes for which it was established shall either have been fully attained, or have lost their meaning.

The direct usefulness of every society, for whatever laudable purpose, does not admit of any exact account. It is so manifold that several of its effects may escape observation. Of every medical society almost, it may be said that its members increase the store of human knowledge by contributions, which have the effect of teaching not only, but of encouraging their compeers. Things and opinions then pass the ordeal of the critical minds, which operate behind placid faces and high-drawn eyebrows. The ordeal over, every one relaxes into the intention to contract friendly relations; and as before, in the discussion-combat at respectful distance, so now, when the antagonist is held fast by the button-hole, men apply a training to the mind which has the object and effect of perpetuating habits of politeness.

In the bosom of our society we have effected all these

things, and a few more. Altogether, it is only our principles and our actions, shaped in accordance with them which have preserved our good ship, and brought her safe over shoals and sandbanks to the open sea, on which she is now steering. There was at the beginning of this century a great exodus of hands, who said: We do not like the steering of the ship, or the rule of the captain. So they went and had a ship of their own. And proudly they sailed past their old ship, and considered her no more than a useless hulk. And there came other ships and made competition, and some had steam, and cast away the tackle. But the time arrived when those in the proud ship called out for coals, and they could not get any; and then they called out to the small ships: Haul us through the region of the calms. But those in the small ships would not. So the proud ship remained becalmed. Only the "Old Medical" prudently kept her tackle as suitable to her construction, put on subsidiary steam power, and is to the present day the safest vessel afloat.

Let us lay aside the mask of metaphor, and show our colours. The society which now competes with our own is a colony of our own. The Medical and Chirurgical Society, with its charter, its transactions, its library, its overflowing funds, has troubles of its own. Before its longing eyes there floats the ambitious project of founding an institution like unto the academy of our Gallic neighbours. It clucked like a hen for its chicks when it called upon the special societies to unite their strength with its own. At last it poured out its own life-blood, and set committees to toil in the service of humanity. But it was neglected by the empire; and while three or four societies were comfortably housed in a royal palace, the embryo academy was left to pine over its unheeded ambition.

Next there are two societies, rich in numbers, and fertile in products. Their objects are special, and not permitted to be exceeded in the progress of the work. The one which has for its objects the advancement of morbid anatomy, we housed and warmed in its early days, when it had nowhere to go to. The other, which takes pleasure in easing the pangs of maternity and in healing the inflictions of life upon the early stages of human existence, has not stood in any relation to ourselves; but it has, like the other societies, our very best wishes for prosperity and success. And how could it be otherwise, when we bear in mind that the objects which they prosecute are only part of the objects of our own. That we are medical, chirurgical, pathological, obstetrical, and that we go yet beyond the combination of these programmes, and admit not only physiological subjects, but devote special

occasions to the crowning work of all medical science—that is, clinical medicine. Our programme therefore rests upon the broadest basis, and in exact proportion to it is the probability of the continuance of our success. When special societies will have exhausted their attractions, ours will continue; when theirs will be done, it will constitute so much more material for our work. For our work is to uphold or to negotiate the unity of medical science, to be the stem of the tree of which specialities are branches.

What better proof could I adduce of the effectual manner in which unnatural divisions are insensibly bridged over by the beneficent action of our meetings than what occurred at the opening meeting of the session now about to be concluded. On that occasion, you, Sir, came forward with samples from the rich store of your labours, thoughts, and experience, and showed us upon them how an elementary pathological process, a chemical disease of a single part, or of an entire organism, invisible and little felt in its beginning, might cause or afford the opportunity for the production of the most remarkable mechanical alterations in almost all the organs of the body. You exhibited to us the surgical, that is to say, external or mechanical results of atrophy, omitting none of the internal or, during life, invisible results of this process, which are commonly claimed as forming part of the province of physic. You showed by this most striking example that logically the science and practice of surgery cannot be separated from the science and practice of physic, and you showed that you yourself, although reputed a surgeon purely so called, nevertheless unite with that deservedly high dignity the qualifications and claims of the highest amongst the brotherhood of physic. You showed by practice and by word of mouth the truth of that argument which is contained in the Act of Parliament, which, under Henry VIII., established the College of Physicians—and which the College has been wise enough to act upon during the year which has elapsed—you have shown that the art and mystery of chirurgery is contained in and forms part of the art and mystery of physic.

Logically the proof of this proposition can hardly be said to have been wanted. It is so generally recognised, that in some countries a separation of surgery from medicine does not exist, either in the provisions of the licensing laws or in professional life. But that a practical illustration should have been given of its truth by one of high repute in surgery, deserves notice on the part of this audience, at a time when more than at any other perhaps we are discussing the peculiarities and necessary improvements in our system of medical education.

Before 1858 medical education in this country was regulated exclusively by the licensing corporations. The manner in which this supervision was effected loudly called for measures of amendment. And these were, after a long and laborious struggle, obtained, in the shape of the Medical Act. Under this Act the Government of the empire participated, for the first time, in the control of the education for that important branch of science which maintains and restores the health of her Majesty's lieges. It is well known how much good this control has already effected. But more is demanded, and more is, I believe, about to be exercised at the hands of the Medical Council.

The next effect of this control must necessarily be a modification of the system of instruction now followed in medical schools. The small schools will have to disappear; the great ones will have to be reorganised. And this reorganisation will necessarily be effected entirely in the interest of the student. Care will have to be taken that only such persons are appointed teachers as possess the necessary personal and scientific qualifications, such considerations as are derived from simple comradeship or collegiate connections being entirely excluded from influencing the selections. The greatest deformity of our educational system, compulsory attendance upon lectures and courses of a practical kind, will have to be abolished. The severity of examinations, on the other hand, will have to be increased. The law will say to the student: You may acquire your knowledge where and howsoever you please; but we demand of you full and sufficient proof of your possessing the knowledge which is deemed requisite for the practice of the medical profession. To the licensing authorities the law will say: It is your duty to satisfy yourself by written and oral examination, by every practical test that can be applied in the dead-house, the sickward, or the laboratory, of the competency of the candidate who comes before you to obtain your licence, and in no case are you authorised to assume the competency of a man in any branch of learning simply because he is certified to have sat so many hours on the college benches, or to have walked up and down the wards of an hospital on so many days.

Even though this budget should not prevail for some time to come, the drift of all measures which we may expect will be in that direction. And I have the less hesitation in firmly believing that the system which I have peremptorily proposed must ultimately prevail, as it is already in active operation in several states of Germany, and about to be introduced into imperial France. It is one of the fruits in the shape of university reform which the rise of natural science has effected in

Germany, and itself again has become the seed of those rich harvests on the field of medical and general science, which every German with a heart for his country may well be proud of.

While thus drawing your attention to valuable precedents, I must not be understood as being desirous to simply prune a foreign importation upon home-grown elements. I look upon every people as able and willing to adopt that which is good and useful in the habits of every other people, provided only prejudice, that is, preconceived opinion, be laid aside. With such a principle to guide him, a man in my position can be of some slight service in interpreting one nation to another, or the professional institutions of one nation to the professional men of another. In this very hour, perhaps, the legislature of a German state is engaged in discussing new provisions for the maintenance of public health and the relation of the medical profession to the community and the state, and the precedent of this country, in enacting statutes for the protection of the public health, and in other matters of similar originality and importance, will be held up as worthy of imitation by a member of each, the Church, the bar, and our profession, who have drawn their information from a memorandum, which at their request I had the honour of preparing for their guidance. Nations should cultivate intercourse, not only for the exchange of merchandise, but also for the exchange of those higher goods which are intellectual acquirements, and which are the outflows of favourable national dispositions and peculiarities. But withal they should care to preserve their own peculiarities, so far as they are either good or indispensable, that is to say, founded upon their physical nature.

The past year, Mr. President, has been fruitful in stirring events, both in the sphere of politics and science. Diplomats have been in long and anxious travail, and have brought forth wars and blue-books. If any one should like to know why the nations so furiously rage together, he may find it by the application of the principle which I have above pointed out as the only guide in the investigation of natural things. A man must have the wish to know the right, to do the right, and to admit nothing but the right to be done; he must have the desire to uphold the law of the state, as well as the law of nations, that is to say, the law of his land as well as the law of other people's lands. This may be appropriately termed the knowledge of the physiology of states. If, then, he makes his observations upon the actual condition of many states, he will find that they deviate greatly from the physiological ideal. He will investigate further, and find

that some symptoms are immaterial and others essential, and that they constitute a peculiar and hitherto unknown disease, occult in its origin, changing in choice of organ principally affected, and producing great pathological changes of tissue. This disease is the *morbus diplomaticus*. It is characterised by its remarkable insidiousness, for a people may to-day be quite hale and healthy, and dream of nothing but peace and prosperity, and to-morrow it may awake and find itself in the clutches of the new pestilence. It may actually find the form of a certificate of death, in the shape of a protocol or a treaty already on the table. Then the friends send in the national Sangrados, who bleed, purify, stimulate, give tonics, and other preparations of steel, and keep the patient upon a remarkably low diet. When this process has lasted long enough, the poor patient cries mercy, and denounces the would-be doctors as lustily as the malady. Then steps in the champion of the world, the great doctor, who cures with flagellation and the alternation of the hot vapour-bath with Siberia, and says to the patient, "I will cure you! Only see how comfortably Poland is sweating!" At this the poor patient is palsied with terror; his mind leaves him, and he goes to his own destruction a willing victim. The *morbus diplomaticus* was only a little bit of poison, which the great doctor and toxicologist had administered to the healthy man, in order to make him a sick man, and after due preparation to take him to his great asylum.

The *morbus diplomaticus* is a chronic disease, and affects great people and rich, as well as poor and small folks. It cannot be cured when it has once gained ground, but it can be prevented by not eating the proffered poison. Curiously enough, this poison is black, and served upon paper, and ignorant people believe its use to be a wholesome occupation. But the last words of the sick man before he disappears in the great asylum are always: "Oh! these leading articles in the 'Times' newspaper. But for them I should now be a sane and prosperous man."

Metaphysical diseases have their own difficulties far surpassing those which we meet with in the course of the ordinary physical practice. It is therefore not to be wondered at that astute publicists should allege that our legislature was but ill-informed as regards the last stage of the *morbus diplomaticus*, not only but also as regards lunacy matters in general. And indeed the past year has witnessed some strange occurrences in which lunacy was made to take a part. But our profession, although perhaps furnishing an advocate in one of its members, has shone forth nobly, and has not only rebutted the groundless charges which excitable

senators hurled against it, but has fully vindicated its just claim of being the final arbiter in the question, whether a man in the position of a convicted criminal shall, after allegation made, be considered lunatic or not.

When a legislature puts itself in antagonism to the medical profession, it shows how little it is aware of the conditions of the temporary or permanent welfare of states. The medical profession administer some of the highest interests of states. They do not indeed levy taxes or absorb any portion of them in salaries. They do not wield armies or commission fleets; no great palace within the shadow of St. Stephen's is set aside to flatter their vanity or even house the representatives of their council. Yet state medicine is administered, and is administered well. It is embodied in one man, who dwells in a modest office in Whitehall, and advises the Lords of Her Majesty's Council; he represents, he is in a manner the pulse of the body medical. When he speaks through his Annual Report, the loudest senators wax timid, and exclaim: "After all, it concerns as much our own bodies as those of the vilest amongst the community." Then is the time for a home thrust, in the words: Not only your bodies, but everything you have and cherish. State medicine is the foundation of the happiness of nations in any form, for state medicine is national economy. State medicine is the application and enforcement of the laws of reason to physical life, as justice is the application of the laws of reason to civil life.

State medicine is indeed primary government, and no civil government can exist for any length that does not administer state medicine as well as justice. This is proved by all history when investigated by the light of the following four propositions:—

1. The foundation of all human existence, of society, is the power of production of food necessary, and a surplus.

2. This power must be permanent. It can only be so by due regard to natural laws. This attention constitutes husbandry.

3. The natural law is that we must return to the soil what we have taken from it in the harvests, the mineral matters which the atmosphere does not supply.

4. This necessitates the utilisation of excretory matters, the only possible measure by which on the one hand the deficiencies of the soil can be supplied; and on the other, these matters be made permanently and at all times innoxious to health.

Who amongst you has not been upon a hundred errands of charity, asked to heal sickness, and found himself unable

to afford more than momentary comfort? The source of all the suffering was poverty, and disease was only the product of this latter. Of course you acted upon impulse, which, like obedience to natural religious law, is always beneficial to some degree. You gave or obtained relief. But you considered the evil incurable. Truly for this evil there is no remedy in the pharmacopœia, but it is nevertheless contained in the code of state medicine, which says: Utilise waste! The waste of one man carried to the soil will afford the condition for growing the food of that man, and nature adds a surplus from her inexhaustible store. Thus you will have cheap bread. Its surplus will buy the cheese. You will not want to carry grain from all quarters of the globe, and pay for it in calico and hardware. Your productions and manufactures you will use at home, and not make war upon others to compel them to trade with you. Cheap bread means prosperity, prosperity means cleanliness and comfort, cleanliness and comfort mean health. But these altogether mean virtue.

State medicine therefore promotes the temporal and eternal welfare of man. It inflicts no penalty but acts constructively. There are, however, penalties for the neglect of its behests, and no one can escape them. In a conflict with the laws of nature man is certain to be worsted; and to be ruined not only civiliter, as it is termed, but to be exterminated from the surface of the earth that can no longer feed him.

Our administrations to the sick are manifold and greatly differ in kind. We have to deal with man metaphysical and man physical. The physical for our present purpose includes the chemical man. To the disordered chemistry of the body we apply various correctives or supplementary substances, and these we term medicines. We do not prepare them ourselves, but rely for their preparation upon persons who make a special calling of it. We sometimes dispense them to our clients, but that constitutes really only a process of sub-division or of compounding what is already prepared. In order to ensure the efficiency of these chemical agents we are obliged to take the greatest care to make certain of their constant purity. We therefore issue a code of prescriptions to our coadjutors, the pharmacutists, in which we enjoin certain processes for the preparation of medicines which are not at present chemically defined, and certain other processes for well defined chemical substances, which the pharmacist may or may not follow. In any case, however, it is his duty to produce, and to sell when we prescribe, medicines, the properties of which are in strict accordance with the standard which we have established in our pharmacopœia.

The necessity and convenience of such a code require no further argument. The safety of the public and the reputation of our art are both thereby guaranteed against dangers from that side. But while we make the law, we do not sufficiently provide for its being rigorously upheld in practice, and there is actually no control over the dispensers of medicines. The power possessed by the College of Physicians to examine apothecaries' shops is scarcely ever exercised, and such as it is can perhaps not be exercised in sundry establishments, which are somewhat inappropriately termed chemists' shops. The proprietors of some of these shops go a step further, and make themselves so far independent of the medical profession as to practise the art of healing upon the basis of their presumption. There are then here great abuses in the midst of our dependencies, which it is one of our foremost duties to rectify. The national pharmacopœia we possess. Our next duty is to obtain an enactment, which shall make it obligatory upon every medicine vendor to possess the remedies prescribed by the pharmacopœia in the quality prescribed by the pharmacopœia. The medicine vendor must therefore be subjected to a control, regulated by a law similar to that which conferred a privilege of visitation upon the College of Physicians. He must next be bound over to confine himself to his business, that is the preparation and compounding of medicines, and to abstain entirely from assuming any of the functions which by every right of law, or what is the same, of common sense, belong to the medical profession.

Such enactments for the regulation of the pharmaceutical body exist in most continental states, and operate to the advantage of the public and the medical profession. For many years the pharmacœutists were great gainers by them, and as it was supposed that they earned very large profits, to the amount nearly of one hundred per cent. upon their outlay, they were popularly called the Ninety-niners. They had a privilege, but were restrained by a tariff fixed by the medical councils. Now it is this privilege and this tariff which have lately operated to the disadvantage of the apothecaries. There can be no doubt that both are the result of that meddlesome kind of government which is now everywhere expiring. So it is to be foreseen that both privilege and tariff will be abandoned, as the public tariff of the price of meat and bread which existed at Paris and elsewhere up to a recent period has been abandoned. This circumstance we can bear in mind while framing our own measures. There should be perfect free-trade in drugs, but every drug-seller should be qualified, as proved by an examination before a competent tribunal, and his medicines should always

be according to the standard recognised by the state, and this standard should be upheld by the representatives of the state and the profession, as expressed in the Medical Council.

The necessity of a strict control regarding the identity and purity of medicines, is strikingly illustrated by the following occurrence, which, as it concerns the memory of one of your predecessors in the chair, Mr. President, who unhappily is now no more, will, by being here related, act as a kind of posthumous justification of his skill and conscientiousness. It is well known that the late Dr. Snow, after having for many years administered chloroform to a large number of patients without any of those fatal accidents which unhappily now and then ensue from this now indispensable agent, occurring to him, determined upon employing amylene for anæsthetic purposes. He read a paper on the subject before this Society, and amylene was very soon largely employed by at least a portion of the medical profession. It happened, however, that two patients of Dr. Snow's successively died under his hands during the administration of amylene, and these melancholy accidents at once put a stop to the further use of amylene by any one. Not long ago a chemical friend of mine informed me, that after the downfall of amylene, he had purchased a lot at a cheap price from one of the first manufacturing houses in London. "I wanted," he said, "to prepare a chemically pure specimen of amylene, and commenced redistilling my material. I have been distilling for a week, thermometer immersed, and how much amylene do you think that my mixture contained?" He looked into my face with placid expectation, when I answered, "Let me guess, 90 per cent." "Not any!" was his reply. Not the smallest portion of material passed at the boiling point of amylene, and the mixture consisted of undetermined hydrocarbons and of amylic alcohol. There was here no question of fraud or mistake. It was some of the same reputed amylene which had been sold and used largely, under the impression that as it had been prepared according to the prescription given by its discoverer, it was pure and fit for use. It is now probable that the accidents which Dr. Snow had the sorrow to experience (and I believe that this sorrow contributed to the shortening of his useful life) were due not to amylene, but to amylic alcohol, the poisonous properties of which are well known, and that the properties of amylene, with regard to the production of anæsthesia, are really as safe as deduced by Snow, from his original experiments made with amylene of undoubted chemical purity.

(To be continued.)

REVIEWS AND NOTICES OF BOOKS.

Stimulants and Narcotics; their Mutual Relations, with Special Researches on the Action of Alcohol, Ether, and Chloroform on the Vital Organism. By FRANCIS E. ANSTIE, M.D., M.R.C.P., Assistant-Physician to, and Lecturer on Materia Medica at, the Westminster Hospital. London: Macmillan & Co., pp. 489.

DR. ANSTIE is quite right when he says that this work is very imperfectly represented by its title; indeed, we know of none which could give any adequate idea of the subject matter discussed. Had we read it through, or at least the first part, before seeing the title, we should probably have considered it an essay upon "The Principles of Therapeutics," "The Theory of Vital Action," or "A New Theory of the Practice of Medicine." This idea will perhaps convey to the reader what we are anxious to suggest: viz., that this work has a far more important bearing upon medical practice than its title would indicate. We do not mean that either of the titles we have mentioned would be more fitting than the one selected, or that the author has erred in choosing it, but only that the subjects discussed are very much more comprehensive and varied than the words "Stimulants and Narcotics" would suggest.

In proof of what we have said, we need only allude to some of the topics discussed. First, we have a history of the doctrine of stimulus and its philosophical origin in the vital theories of the ancients; next follows a criticism of this doctrine, which, assuming that all mental excitement, increased sensibility and pain, convulsive muscular action, increased secretion, and increase in the force or frequency of the heart's action, are caused by and are proofs of a stimulant action upon the organism, is very stoutly, and, we feel bound to say, in most cases successfully contested by the author. Having thus demolished to his own satisfaction the old doctrine of stimulus, Dr. Anstie offers some reasonable suggestions for its reconstruction, and describes what he believes to be the genuine effects of stimulation, namely, the relief of pain, the removal of muscular convulsion, the reduction of an unduly frequent circulation, of excessive secretion, of general or local debility, or fatigue of brain, muscle, &c., the removal of delirium, maniacal excitement, coma, &c., the support of the organism in the absence of the common articles of nutriment, and the local increase of nutrition. All

this occupies upwards of 160 pages; then follow 100 pages on narcotics, Chapter V. giving decidedly the best clinical account of the symptoms of narcosis with which we are acquainted. The author also describes certain bodily conditions which are unfavourable to the production of narcosis, and in Chapter VII. discusses the relation which stimulation and narcosis bear to each other in the action of those substances which are capable of producing both.

The Chapter on Acro-narcotics is followed by one giving the general conclusions derivable from the author's investigation of the whole subject.

The Second Part of the work details some special researches conducted by the author on the action of ether, chloroform, and alcohol.

In commenting upon this work, we may say of the latter part, that though the author has not perhaps added very largely to our previous knowledge of these subjects, he has placed on record a great number of experiments, many of them of an entirely novel kind, and from these he has deduced most important conclusions. It is impossible for us here to criticise these at length, nor can we even enumerate them all, but we may mention some few, in the hope that their novelty may induce those who have not read the work to study it carefully for themselves.

First, it is shown that all these agents produce a paralysing influence upon the nervous system, which commences at the periphery and spreads towards the centre; that the brain shows symptoms of poisoning before the spinal cord; and that the latter is affected in the order from behind forwards in animals, or from below upwards in man. But a remarkable fact, and one of much practical importance, is here pointed out, viz., that there are certain regions supplied by spinal nerves which are very slowly anæsthetised. This is particularly the case with regard to the ano-genital region, and the matrix of the toe nail, so that it requires, one may say, a more dangerous dose of the anæsthetic to render these parts insensible. Hence probably the reason why many deaths have occurred during the performance of comparatively trivial operations upon these regions.

The symptoms indicative of palsy of the medulla oblongata occur later in the order of complete narcosis, hence "hurried, irregular, or morbidly depressed respiration, dysphagia, &c., are produced only by a profound narcotic impression, and are the precursors of death in what may be called the normal cases of fatal anæsthetic action, those, namely, in which death takes place by apnea," p. 468.

The author rejects entirely the commonly received opinion

that the so-called "symptoms of excitement" are due to any stimulant action of the anæsthetic; rather, he says, they are a "part of the narcotic or depressing influence upon the nervous system," and an indication that the power of the will is being paralysed.

With regard to the recession of the symptoms of narcosis, it is affirmed that this takes place in the inverse order of their accession, the effects of those narcotics, which are first manifested, are the first also to disappear. On the subject of "tolerance," a most important difference in this respect is shown to exist between alcohol on the one hand, and ether and chloroform on the other; for while the system may become largely tolerant of the former, it shows little or no such indication as regards the two latter. Lastly, the dose of chloroform or ether required to produce full narcosis varies but little, if at all, in different states of system, just as much and no more being required in a case of tetanus as in one of health.

It is in the First Part of the work, however, that the author has laid himself most open to criticism, chiefly because of the novelty and startling character of some of the opinions therein expressed. We have said that "the theory of vital action" might not inappropriately be given as a title for this book: for the author, in discoursing upon the doctrine of stimulus, as employed in the present day, traces it back to the theory of vital spirits held by the ancients, and accordingly has ventured upon the consideration of that most intricate of all physiological subjects, the *vital principle*, in order to justify and to explain the use of a word which he adopts from Coleridge, as expressing "some unvarying and peculiar condition of its (life's) existence." The effect of the author's reasoning upon our mind has been anything but satisfactory, and we believe that if, instead of being led away by his admiration of the subtle reasoning of Coleridge, Dr. Anstie had simply trusted to his own powers, he would have given us something much more philosophical and intelligible. We must confess to have been hopelessly puzzled by the following sentences, and after no little thought are constrained to admit that we can attach no definite meaning whatever to them. Doubtless this is due to our own imperfection; our readers may judge of that for themselves. At page 112 the author says,—

"Let us therefore be content to 'reduce the idea of life to its simplest and most comprehensive form or mode of action; that is, to some characteristic instinct or tendency, evident in all its manifestations, and involved in the idea itself,' and we shall agree, I think with Coleridge, that the only such tendency to which we can ultimately refer all the phenomena, is

that of *Individuation*, 'the internal copula of bodies . . . the power which discloses itself from within as a principle of *unity* in the *many*.'"

At page 264, with reference to the phenomena of narcosis, he speaks of—

"The progressive destruction of the living powers of the great instrument of co-ordination—the instrument, that is, of the special individuation, which is characteristic of the highest animal life."

And, lastly, at page 281, he says—

"Life is not any special force, nor is it any 'collocation of forces;' it is not *in* the organism, for it is the very organism itself. Not the mere clay, indeed, however cunningly fashioned, *but the thought of the Creator* (the italics are our own), binding together in wonderful relations the tissues of the material form, and the forces of the surrounding universe, it is this which makes the individual—the life."

The conviction is forced upon our mind that Dr. Anstie somehow got into a metaphysical abstraction, and confounded the individual with the *life* of the individual, the organism with that which makes the organism *alive*; in fact, that he has fallen into the same snare as the logicians of old, who defined *substance* to be "that which makes a thing what it is." And he is, we fear, in some danger of arriving at the equally abstruse dogma, that the motion of the earth *is* "God rotating," or that "there is nothing but nothing," for surely, on the face of the above, *individuation* would apply just as well to things inanimate as to things animate.

We do not profess to give any new definition of life, it appears to us that far too much time has already been spent on this most profitless subject. Why is it that philosophers have been so eager to *define* life, when as yet they have not given us a single definition of any other force or principle, such as electricity, chemical action, light, heat, or a dozen others, all of which we can talk about and use, and for all practical purposes understand. We hold, of course, that life in the abstract is precisely the same in all forms of organisation; that it is identical in essence, whether it exists in the lowest vegetable or in the highest animal structure; and there is this law of its being, so to say, that it cannot be evolved from any but a pre-existing *living* form. The creation of a body which we speak of as possessed of *life*, be it a monad or a man, is everywhere and in all cases, and we believe has ever been (though some *appear* to doubt that) the work of a monad or a man, and of none other; as such it has descended from all time, and as the mind follows this idea back to the period when life in its every form came into existence, accompanied as it then was by the birth of all other forces, the conviction is forced upon us that all life and every other

force is of God, and to attempt to define these is to set the human mind a task which its very constitution forbids it to perform.

Another most important question, brought under notice by Dr. Anstie, is, as to what should or should not be called a *food*: he considers that there is great need of revision of the current definitions of this word, on the ground of the obvious confusion and uncertainty which exists respecting it, and after a most careful critical examination of the whole subject, he arrives at the opinion that "the only real test of the alimentary character of any substance is its power to support life for a longer period than it could subsist if deprived of all external help," p. 268, and consequently, that "all substances which by their direct action tend to rectify some deficient or too redundant natural action or tendency," p. 161 (which is the author's definition of a stimulant), ought at least provisionally to be classed as *a special variety of food*. Hence, opium, tobacco, strychnia, hashish, as well as all the ordinary alcoholic stimuli, and a variety of other substances, are to be regarded as foods. We wish, in fairness to our author, we had space to dwell upon this very important question, which has been by him most ably handled: we cannot at present quite go along with him in his conclusions, possibly because we have a weakness for old definitions, but there certainly seems to us great practical utility in restricting the use of the word food to those substances only which form tissue. After all perhaps it is only a dispute about terms.

Our space is more than occupied, and we must desist. We do so with much regret, for we candidly acknowledge that we have seldom met with a book displaying more vigour of thought, more originality, or one having more important bearings upon the great principles of medical practice. If we are not mistaken, this work will make a deep impression upon the medical mind of this country, and may probably mark an epoch in the history of medicine. It is a book to be carefully studied by all, and we owe an apology to the author for being compelled to give it so very inadequate a notice. There are many other topics on which we would have gladly expressed an opinion, but we hope our readers will compensate for our deficiency by carefully studying the work for themselves.

A Clinical Memoir on certain Diseases of the Eye and Ear, consequent on Inherited Syphilis. By JONATHAN HUTCHINSON, F.R.C.S., Senior Assistant-Surgeon, London Hospital; Surgeon to the Metropolitan Free Hospital; Assistant-Surgeon to the Royal London Ophthalmic Hospital. Pp. 259. London: Churchill, 1863.

FOR several years past there have appeared a series of papers on the subject of hereditary syphilis, in its relation to diseases of the eye, by Mr. Hutchinson, in the London Ophthalmic Hospital Reports. Of these, as we learn from the introduction, the present work is a much extended reprint. The author has turned his attention to the subject of inherited syphilis generally, for the past fourteen years, his interest in it having first been excited by a severe case of so-called "strumous" disease of the bones of the skull in a youth, whose mother had suffered from syphilis. He found that while the infantile disease had been well described and successfully treated, scarcely anything was known, and nothing defined, with reference to syphilitic taint at more advanced ages; although many authors seemed to suspect that it was the primary cause of many "scrofulous" diseases.

During a very extended hospital experience from the year 1850, Mr. Hutchinson has remarked the comparative frequency, in the young, of evidences of past *iritis* in association with other suspicious symptoms, and with a peculiar physiognomy; and for many years he has carefully noted, in all suspected cases, the features, and has caused casts to be taken of the interior of the mouth. In the course of these examinations he was led to notice the very frequent occurrence of malformed teeth. He soon obtained evidence that the upper central incisor teeth furnished the most reliable indications of inherited taint; and at the same time became convinced, that the disease known as "strumous corneitis," was never met with except in conjunction with the peculiar physiognomy and malformation of teeth. While the author has been accumulating this evidence, and gradually bringing it before the world, he has found that many eminent surgeons have acceded to his views. For example, Mr. Dixon proposes to substitute the term "syphilitic" for "strumous" corneitis, and Mr. Paget has adopted Mr. Hutchinson's opinions regarding the diagnostic value of the dental malformations. Similar views, regarding the relation of syphilis to "struma," have been adopted by authors of high repute, including Ricord, Erasmus Wilson, and others.

It has been supposed by some, that the author may have been the means of propagating to an undue amount, sus-

picious as to the prevalence and effects of hereditary taint; but so far from this being the case, it is consolatory to those who sympathize with erring humanity, to find that the effect of his very extended researches, has been to limit his belief in the extent of this taint. He says, "Whilst there are peculiar forms of disease which I believe to be its special results, I feel confident respecting the great majority of the chronic diathetic diseases of early life, that they have nothing whatever to do with it."

In accordance with the title of Clinical Memoir, which Mr. Hutchinson has given to his book, the contents consist very largely of cases; and as his views are in the main novel, and require all the confirmation that is attainable from a careful study of a mass of facts, this plan was absolutely necessary. These facts are here presented to us in the form most available for study and for reference.

The first chapter treats of iritis, which was first described in connection with its true cause, inherited syphilis, by Mr. Lawrence, and is the only eye-disease hitherto recognised with precision, as dependent upon that cause. There are twenty-three cases given, and these are followed by a summary of conclusions, tabular statement of cases, diagnosis, treatment, &c., concluding with a series of aphorisms on the subject.

In succeeding chapters, we find treated in the same way, interstitial keratitis, with the large number of 102 cases reported, choroiditis, retinitis, cataract, inflammation of the lens and vitreous body, aquo-capsulitis, and amaurosis.

In the seventh chapter, we have the subject of deafness from the same cause. In the eighth, diseases of the ocular appendages; in the ninth, miscellaneous cases and observations; in the tenth, diagnosis, and aphorisms and commentaries upon hereditary and constitutional syphilis. The work concludes with an appendix, containing a fresh collection of cases of syphilitic affection of the deeper tissues of the eye, with tables and remarks. The reader will find several excellent coloured plates, and woodcuts, illustrating the characters of syphilitic eye-disease, ophthalmoscopic appearances, and dental malformations.

We shall now endeavour to give the reader an outline of the principal points elicited and illustrated in this work. In the introduction, the author states "that chronic interstitial keratitis" is essentially an heredito-syphilitic disease, and that dental peculiarities of a certain kind are, when cautiously examined, a reliable indication of inherited taint, and he refers to subsequent pages for the corroboration of these assertions. With reference to iritis in infants, it appears that the subjects

are more often females, that it is seldom complicated or very severe, but liable to lead to occlusion of the pupil from free effusion of lymph; very amenable to the influence of mercury. The little patients need much support. Atropine drops are essential. The author usually employs inunction of the mild mercurial ointment.

Regarding chronic interstitial corneitis as identical with "strumous corneitis," he is still of opinion that although it is specially characteristic of hereditary syphilis, it is very rarely met with, except in the wards of an Ophthalmic Hospital. He believes at present that it "never occurs but in the subjects of inherited taint." At page 29 we have a summary of its origin and phenomena. In the milder cases there will be seen little more than interstitial deposit. The more severe cases display more or less vivid vascularity and photophobia, preceded often by a characteristic ground-glass appearance; or copious lymphatic effusion moulded to the form of the back of the cornea, in conjunction probably with interstitial deposit: sometimes the punctate effusion of lymph behind the cornea, formerly thought so characteristic of aquo-capsulitis. At page 124 is a summary of the author's reasons for regarding this disease as syphilitic, comprised chiefly in its being specific, its subjects having the specific physiognomy and teeth, but not being of the strumous or tubercular diathesis. He lays stress upon the fact that they are generally the eldest living children of a family; and often there are co-existent secondary or tertiary symptoms. The treatment consists of the use of mercurials and iodides, tonics, &c. Partial recovery, but not a perfect cure, is obtainable in the great majority of instances.

The cases of retinitis and choroiditis, and inflammation of the globe, with the accompanying remarks, are particularly valuable, as they are illustrated by ophthalmoscopic observation. Syphilitic lentitis or cataract is not congenital; this accords with the fact which the author seems to think established, that the syphilitic taint does not usually cause intra-uterine disease. There are several interesting cases and points touched upon in the chapter on aquo-capsulitis, so-called. Until quite recently, the author had never seen an example of amaurosis with white atrophy of the optic nerve, in connexion with inherited taint, but since then his attention has been directed to several cases, which are here detailed.

The same remarks apply to the subject of syphilitic deafness. Had this occurred to him earlier, he would doubtless, during the progress of his examination of cases detailed in this record, have found means to obtain more extended information. He thinks that one form is peculiar, in which the

function fails without any external disease. In his notice of 15 cases, all infected with syphilitic taint, none displayed the symptoms of strumous ear-disease, such as profuse otorrhœa, with ulcerations. There will be found some valuable cases and observations on the diseases of the lachrymal sac and ocular appendages.

It is a matter of the utmost importance to recognise the specific external appearances indicative of hereditary syphilis, and our author enters minutely into this division of his subject. The two chief points to which his researches have been directed are the *general physiognomy* and the *dental malformations*. The most valuable test is the unnatural condition of the central upper incisors of the permanent set of teeth. They will be found short and narrow, with a broad vertical notch in their edges, and their corners rounded off. The reader will find this typical condition admirably illustrated in the plates and woodcuts. As diagnosis is, after all, the most important part of the surgeon's duty, we cannot do better than quote the author's words :

"Next in value to the malformations of the teeth are the state of the patient's skin, the formation of his nose, and the contour of his forehead. The skin is almost always thick, pasty, and opaque. It also often shows little pits and scars, the relics of a former eruption ; and at the angles of the mouth are radiating linear scars running out into the cheeks. The bridge of the nose is almost always broader than usual, and low. Often it is remarkably sunk and expanded. The forehead is usually large and protuberant in the regions of the frontal eminences. Often there is a well marked, broad depression a little above the eyebrows. The hair is usually dry and thin, and now and then (but only rarely) the nails are broken and splitting into layers. If the eyes have already suffered, a hazy state of the corneæ, and a peculiar, leaden, lustreless condition of the irides, with or without synechiæ, may be expected. If, however, the eyes have not yet been attacked by syphilitic inflammation, they will present no deviation from the state of perfect health and brilliancy. The recurrence of well characterised interstitial keratitis is now considered by several high authorities as pathognomonic of inherited taint. It is almost invariably coincident with the syphilitic type of teeth, and when these two conditions are found together in the same individual, I should certainly feel that the diagnosis was beyond doubt."

We can only refer the reader to the very valuable collection of aphorisms and commentaries on constitutional syphilis and its hereditary tendency—seventy-three in number. The appendix contains, with many cases, some valuable remarks regarding the importance of diagnosing the syphilitic origin of the affections of the deep tissues of the eye. These are found rarely to originate later than two years after the primary disease. As a general rule, the author treats them by small doses of mercurials, and large doses of iodide of potassium, as much as from ten to fifteen grains three times a day, with local depletion, tonics, &c., in appropriate cases.

We think that the profession is under great obligations to Mr. Hutchinson for his very laborious researches with reference to the connexion of constitutional syphilis and certain specific eye diseases. The subject is novel, and it is requisite that a much larger mass of evidence than even he has brought forward should be elicited before surgeons, in general, will accept it as an incontrovertible axiom that certain unnatural conditions of the features, of the teeth, or of the cornea, are pathognomonic signs of inherited syphilis. He will have done a great work, if he has established the fact, of which we imagine the mass of ophthalmic surgeons have hitherto had no suspicion, that "scrofulous" is in reality "syphilitic" corneitis. We cannot speak too highly of the way in which the cases have been drawn up and narrated, the brief summary at their head being especially valuable, as directing the attention of the reader to the most prominent points, at the same time that no fact of real significance is omitted. The subject of syphilis, acquired and hereditary, is one of vital importance, and if it be true that the poison is becoming disseminated more and more both in civil and military life, we must acknowledge that it will necessarily demand increasing attention on the part of the surgeon and the social economist.

On Change of Climate; a Guide for Travellers in pursuit of Health. By THOMAS MORE MADDEN, M.D., Demonstrator of Anatomy in the Carmichael or Richmond Hospital School of Medicine, &c. London: Newby, 1864. Pp. 387.

Dr. MADDEN'S book is, what it professes to be, a guide for travellers in pursuit of health, and to us it seems to bid fair to be a useful and trustworthy guide, inasmuch as the author writes from his own personal experience of the places visited.

"Quos ipse vidi"

can be said by our author of most of the places, and at many he seems to have made a protracted sojourn. Thus, for instance, he tells us that he made his first visit to Malaga in 1858, and since that date has twice returned to the same city, residing there on each occasion for several months, and occupying himself daily with observations on the climate and its effects on the patients under his own immediate care, as well as on the many other invalids who were resident at Malaga during three winters. The nature of the experience on which the book is founded, will, however, be best gathered from the author's own words in his preface:—

"Little or no assistance has been derived from any of the works on climate recently published in England; for writers on this question must either speak from their personal knowledge of the climates they treat of, or else, as some have done, copy from preceding writers, and thus statements frequently contradicted, and long detected errors are confidently repeated, and still pass current. Therefore, I have mainly relied on my own notes and recollections of each place, and when they were insufficient, I have referred to the native, unprofessional, local observers, rather than to the works of those who might either be suspected of undue partiality in favour of a particular climate, or have some other object in decrying its reputation."

In Chapter 1 the author gives the results of his experience respecting the influence of change of climate upon cases of consumption, and as it is for this complaint, as well as for diseases of the respiratory organs generally, that change of air is so commonly recommended, it will be well to observe what is said on this subject.

Alluding to the evil practice of advising change of climate for an invalid only when his disease has got far beyond the reach of physic and physicians at home, it is observed that often when the change is resolved upon, the unlucky patient is packed off to about the very worst possible of places for him, and the author's firm conviction is, that as many lives are annually sacrificed by improper selection of climate as are cured by a judicious selection of this important remedy. From what we have ourselves seen of pulmonary invalids when abroad, and from converse with them, as well as with some of the local physicians in the health-resorts of Europe, we are disposed to think that there is much truth in this statement. What a very common story it is for an invalid to say that he went under probably the advice of at least three eminent physicians to some of the sanatoria of southern Europe, and on consulting the local physician of the place has been told that his is a case likely to get nothing but mischief from a prolonged sojourn, and that the sooner he returns to his home in England the better. The reason of such lamentable error in the advice given to invalids is certainly accounted for in a measure in the following passage from Dr. Madden's book, and in the quotation from the admirable remarks of Dr. Corrigan on the same subject, which are given in page 33:—

"There is not, I fear, as yet a sufficient appreciation of the importance of studying climate in connection with consumption under its primary divisions of tonic and sedative. And we find practically, in fact, the distinction in question altogether ignored."

And Dr. Corrigan, dividing pulmonary diseases into two classes, viz., those of relaxation and debility, and those of irritation and increased vascular action, says that so in like manner climates may be divided into two great groups, one

comprising the climates exercising a tonic and bracing effect, the second those of a sedative or soothing character, the second group being more limited and far more restricted in its use to invalids than the former. Similar views have lately been put forth by a writer in the "Medical Mirror."*

We have thought it well to draw attention to this part of Dr. Madden's book, for it has seemed to us that the usual rule followed is that the worse and more exhausted the patient, the more depressing and relaxing is to be the place whither he must go, and the less of lung he has left, the less should be the amount of oxygen in the shape of fresh air supplied to him.

Another source of error in the choice of a climate is pointed out at page 34, and this is—faulty diagnosis. The author says:—

"I have heard consumptive patients complain that such a climate which cured so and so, who also had 'weak lungs,' or a 'delicacy of the chest,' as they call it, proved worse than useless in their case. Nor could I wonder at this, knowing that the individual they spoke of suffered from asthma or chronic bronchitis, or some other complaint very different from phthisis; and it must have been in this way that places like Pau, Mentone, &c., have acquired their unmerited reputation."

Madeira, Rome, Pisa, and sometimes even Lisbon, are named as warm, equable, slightly humid climates, suitable to cases where symptoms of irritation and diminished secretion predominate. In other and more numerous cases, provided these are free from all inflammatory symptoms, the warm, bracing, and dry climates of Middle and Upper Egypt, of Malaga, Nice, and Western Australia, are specially commended.

Dr. Madden says:

"I have seen consumptive patients in the last stage of the disease, who, on landing at Malaga, were so weakened by hectic fever, purulent expectoration, unceasing cough, and all the other symptoms of a cavity in the lung, that in mounting the stairs of the hotel they had to be assisted by an attendant, and even then were obliged to sit down between every few steps, and within a very short time I have seen those persons so improved that they could ascend with comparative ease the high stairs of the hotels of the Alameda."

Unhappily, this striking amendment was but rarely of a permanent kind. After considering the sort of diseases most benefited by change of climate, Dr. Madden gives an account of the South of Spain, and devotes two important and interesting chapters to Malaga and its climate.

The first of these gives a general description of the place

* "On Change of Air in the Prevention and Cure of Pulmonary Phthisis." By John C. Thorowgood, M.D., London (in the May and June numbers of the "Medical Mirror;" reprinted since in a separate form).

and its people, the sort of accommodation in the way of hotels and lodgings for invalids, and the amusements that there are to prevent the time from hanging heavily.

A difficulty is often experienced in obtaining lodgings, from the fact that the Spaniards, believing in the contagious character of consumption, hesitate to receive invalids into their houses. The "Casas de Pupilas," or boarding-houses, are badly situate, and have a cuisine that is detestable, hence these will not do for the invalid.

The chief hotels of the place are on the Alameda, or fashionable promenade facing the sea. Years ago, indeed, a part of it was actually under water, but now, in consequence of the rapidity with which the sea has receded from Malaga, two streets and a dry wide beach intervene between the Alameda and the ocean.

The climate is set down as dry, warm, equable, the thermometer varying little during the day, except when the "terral" or "levante" winds prevail, both of which produce great and rapid changes in the temperature.

The mean annual temperature of Malaga is 15° higher than London, 1° lower than Algiers, and 7° lower than Cairo.

The air of Malaga, described as dry and tonic, is spoken of by Dr. Madden as excellent in cases of incipient phthisis, though in the cases of young persons and children it is by the natives considered an inferior climate to that of Granada, and it is the custom at Malaga for the religious orders and families to send their novices and students to Granada on account of the more salubrious air of that place.

The chapters devoted especially to a consideration of the climate of Algiers and of Upper Egypt, will be found amply to repay perusal, both for the valuable instruction they afford respecting the influence of these climates over the invalid, as well as for the varied and entertaining accounts given therein of the history of these places, the habits and amusements of the inhabitants, the kind of living to be had, and the accommodation to be met with in the lodging-houses and hotels of the place.

The climate of Algiers is described as somewhat variable, and as a positively dangerous climate in all affections of a congestive character; dwellers at Algiers seem to have a peculiar tendency to febrile complaints with engorgement of the viscera.

The climate of Nice, Cannes, Mentone, and Hyeres all come in for very judicious consideration. Though Dr. Madden says a word in favour of Nice, as beneficial in cases of phthisis with much exhaustion and langour, he does not omit the men-

tion of the cemetery of the English, so often alluded to in connexion with phthisis at Nice.

"Voulez-vous savoir," asks M. Champouillon, "ce que deviennent les tuberculeux à Nice? Allez au cimetière."

We have ourselves heard English physicians, who had spent a winter or two at Nice, echo in substance this remark of Champouillon, and say, that the physician is a fortunate man who brings a consumptive patient home from Nice to England alive.

From what we have ourselves been able to learn from those who are pretty familiar, both as physicians and patients, with the climate of Nice, it has seemed that the air of the old town, which it more among the hills, and further removed from the sea, is excellent in many cases of phthisis, attended with profuse secretion and langour, and exhaustion of system, but the line of town close upon the sea has an air sharp, very variable, and irritating, and consequently about the worst air possible for a patient with a weak chest.

Dr. Madden has given a chapter to Mentone and its climate, and we have no hesitation in saying that no invalid should think of passing a winter at Mentone without perusing this chapter, which will tell him a few things not generally known about this much-talked-of place.

Pisa we find at page 316 to be much commended for its soothing and sedative air, but little can be said for Naples as a resort for the phthisical, if the testimony of an invalid who had resided there is to be credited. Let this individual speak for himself from his own diary :

"Naples, February 22.—Yesterday we had December's wind ; to-day we have November's rain, and such is the climate of Naples."

"March 9th.—The invalid is now recovering from a severe pleurisy which he finds to be the endemic of Naples, and for the cure of which he has been freely bled by the local physicians. He says on the 14th, 'If a man be tired of the slow progress of consumption, let him repair to Naples, and the *dénouement* will be much more rapid.' " *

Further experience goes to prove the truth of these observations as applied to Naples in the spring, for at this season severe winds prevail, which are most inimical to phthisical patients. For dyspeptic, hypochondriacal, and melancholic patients, Naples is a residence to be commended, the bright sky and the clear air having a most cheering and exhilarating effect on the dyspeptic hypochondriac.

Our space forbids that we should follow Dr. Madden in his interesting accounts of Sicily, Malta, and Egypt, for to each of these places an ample chapter is assigned. The climate of Cairo is most highly praised as a resort for the consumptive

* Matthew's "Diary of an Invalid," pp. 192 and 238.

from the end of October to the middle of March. The author notices the remarkable dryness of the air on the Nile, and explains this by the fact that the natural evaporation from the river is more than counteracted by the influence of the dry winds from the adjacent desert.

Compelled now to part with Dr. Madden and his interesting book, we would merely add that it will be found a useful addition to the library of the practical physician, and a good handbook for those who are inclined to travel in the South of Europe in search of health.

As yet, medical literature is not overdone with reliable works on climate, and we gladly welcome such a book as that just noticed as a valuable contribution to our knowledge of this subject.

A Handbook of Uterine Therapeutics. By EDWARD JOHN TILT, M.D., M.R.C.P., Consulting Physician to the Farringdon General Dispensary, etc. Second edition, pp. 318, post 8vo. London: Churchill and Sons. 1864.

HAVING reviewed the first edition of Dr. Tilt's handbook at some length in our February number, it will be unnecessary for us to occupy much space with the notice of the second edition, which has been soon called for.

The author has considerably improved the work by additions and emendations wherever they have seemed desirable, and it is, therefore, now more than ever deserving of the high eulogium which has been bestowed upon it by the medical press.

The rapid sale of the first edition has fully established the correctness of the opinion which we expressed that the handbook supplies a want which has often been felt, by bringing together, within moderate compass, the therapeutic agents which are most serviceable in the treatment of the diseases of women; in fact there was no book of the kind until this made its appearance, and we have great pleasure in endorsing all that was said in our recent review in favour of this excellent and compendious treatise.

We learn from the preface that, although the work only appeared last year, it has already been translated into German, so that it is evident that Dr. Tilt's views find favour amongst continental as well as British practitioners.

On the Practice of Employing certain Substitutes for the Genuine Ingredients in some Articles of Daily Food: considered as it affects the Health of the Community. By a LADY. Pp. 24. London: H. K. Lewis. 1864.

THIS pamphlet, of which we think we may without any great breach of confidence, assign the authorship to a lady, whose writings have already been favourably noticed in our columns, deals with the important question of the influence which certain adulterations of articles in daily use exerts upon the health of the community. The articles to which attention is especially directed are baking and egg powders, the former consisting of carbonate of soda and tartaric acid, combined with a small proportion of rice or flour, while the latter are still more objectionable, because they are not unfrequently coloured with chromate of lead, and because they are substituted for eggs, although they possess no nutritive properties. Adulterations are unfortunately common in respect to every article of food, but the deleterious results of using the two substances treated of in the pamphlet before us have not hitherto attracted much notice. The importance of the subject may, however, be judged when it is borne in mind that not less than a ton of baking-powder is said to be consumed daily, and that egg-powders are largely substituted for eggs. Another reason for fully inquiring into this matter is that these substances are employed in making articles of food which are chiefly in use amongst children and invalids, who can little afford to be deprived of the nutriment which the light food prepared for them should contain.

The pamphlet, which also includes a short account of the proceedings at the meeting of the Brighton Literary and Scientific Institution, where the paper was read, is written in a sensible and impartial manner, and is worthy of the perusal of all who object to have their food adulterated, or otherwise tampered with.

THE MONTH.

THE ELECTION OF COUNCILLORS AT THE ROYAL COLLEGE OF SURGEONS.

THE agitation which was commenced last year promises to be renewed with double force at the forthcoming election, and the warmth and energy displayed in canvassing are of a character wholly unprecedented on any previous occasion.

The candidates for the three vacancies are six in number, viz., Messrs. Le Gros Clark, Curling, Gulliver, Hancock, McWhinnie, and Turner of Manchester. Two of these, Messrs. Gulliver and Hancock, offer themselves for re-election, the others being untried aspirants for position. The candidates whose chances of success are stated to be the best, are Mr. Hancock, who has only held office for one year, and whom it would consequently be unfair to turn out just as he has tasted the sweets of office; and Mr. Turner, who is the only provincial candidate, and as such, independently of his professional merits, will doubtless obtain considerable support. If, however, as he is reported to have said at the Fellows' dinner, he purposes to limit his attendance at the Council Board to four visits yearly, it is evident that his services will be of little avail to his constituents, and unless a public contradiction of this report be made widely known before July 7th, it must greatly militate against his election. Mr. Gulliver, against whom it would be impossible to find any real objection, will, it is feared, fall a victim to the determined opposition which has been evinced against the monopoly until recently held by the Council, who had virtually constituted themselves into a self-electing body. The other candidates seem to hold an equal position in the estimation of the Fellows; so that, as we have already observed, the struggle must be a very severe one.

Some of the provincial surgeons, dissatisfied at the exclusive manner in which their London brethren monopolise the entire management of the affairs of the College, have convened a meeting for the day of election (July 7th) to consider the desirability of an alteration of the manner in which the election of councillors is at present conducted. The change which they especially desire is the abrogation of the fifteenth section of the Charter, in which it is expressly stated that the Fellows shall be "allowed to vote in person only, and not by proxy." This alteration has been strongly urged in some quarters, and if it can be shown to be of decided advantage, it ought to be adopted; but it has various drawbacks which do not appear to have been sufficiently estimated by those who advocate the innovation. If voting by proxy were allowed, an evident advantage would be given to those candidates who depended rather upon electioneering tactics and the pertinacity of their supporters than upon their individual merits and fitness for office; and the effect of this system of election would be that the bulk of the Fellows would gradually fall into a state of apathy and indifference. The chief, and in fact the only valid argument which has been put forward in favour of the alteration is that the pro-

vincial surgeons are not represented by any of their body; but it is doubtful whether the mere change in the manner of voting would in any marked degree neutralise the tendency to the election of metropolitan surgeons. One of the main qualities required of the councillors is regular attendance at the council meetings, and to the feeling that this would not be given by provincial equally with metropolitan representatives is attributable the fact that the latter have the best chance of success. Let the provincial candidates undertake to be assiduous in their attendance to their duties, and let their provincial supporters show that they value the privilege of voting by making a little sacrifice of time and expense, and in the course of a few years the balance of power must become duly adjusted.

MEDICAL MEN IN ENGLAND.—According to Dr. Farr the number of medical men in this country is on the decrease. In 1851 there were, he says, 11,105 medical practitioners in England under 40 years of age, whilst in 1861 there were only 9,910.

The President of the Medical Council, Dr. George Burrows, accompanied by the Registrar, Dr. Francis Hawkins, had an interview on the 21st of June with the Secretary of State for the Home Department. We hope that this may lead to some practical results.

LONDON HOSPITAL.—The laying of the foundation stone of the new wing to be erected at the London Hospital, will take place on July 4th. The Prince of Wales intends to be present, and the Duke of Cambridge will take the chair. The estimated cost of the new wing is £27,000.

DAVY MEMORIAL.—Mr. Coulson, the High Sheriff of Cornwall, and Senior Surgeon to St. Mary's Hospital, has signified to the honorary secretaries of the Memorial movement, his intention to subscribe 100 guineas to the fund.

BRITISH METEOROLOGICAL SOCIETY.—At the meeting held on June 15th, Dr. R. Dundas Thomson was elected President for the year 1864-5. Amongst the names of the other office bearers, we find those of Dr. Tripe, Medical Officer of Health, as one of the Vice-Presidents, and of Mr. Brooke, F.R.S., F.R.C.S., as a Member of the Council. It was stated at the meeting, that it was intended to make application to the Crown for a Royal Charter of Incorporation, for the better constitution and regulation of the Society.

PASS-LISTS.

OXFORD UNIVERSITY.—In a congregation held on June 2nd, the degree of Doctor of Medicine was conferred upon Alfred Willis, St. John's College.

CAMBRIDGE UNIVERSITY.—In a congregation held on June 20th, the degree of Doctor of Medicine was conferred upon the following gentlemen:—Charles Alexander Lockhart Robertson, Caius, and Peter Walbrook Latham, Downing.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a general meeting of

the Fellows, held on June 17, the following gentlemen were admitted to practise physic as Licentiates of the College:—Bowles, Robert Leamon, Folkestone; Churchill, John Foot, Croydon; Cooper, George Frederick, Reading; Court, Josiah, Guy's Hospital; Dodsworth, Frederick Charles, Turnham Green; Hammond, Charles, Southampton; St. John, Charles, Foulis Terrace, Onslow Square; Wise, William Climie, Plumstead.

At the same meeting, the following gentlemen were reported to have passed the primary examination:—Cuddeford, Thomas, St. Bartholomew's Hospital; Taylor, James, Glasgow; Worsley, James Henry, Bury, Lancashire.

ROYAL COLLEGE OF SURGEONS, LONDON.—On June 9th, the following gentlemen, having undergone the examinations for the Fellowship, were admitted as Fellows:—Beddard, James, Edgbaston, Birmingham; Carter, Robert Brudenell, Stroud, Gloucestershire; Cresswell, Alfred, P. and O. S. N. Co.'s Service; Folker, William Henry, Hanley; Nankivell, Arthur Wolcot, Torquay, Devon; Travers, William, Charing Cross Hospital; Vernon, Bowater John, St. Bartholomew's Hospital; Webb, William, Wirksworth; Wheelhouse, Claudius Galen, East Parade, Leeds; Willey, Henry, Poplar Hospital; Wotton, Henry, Gloucester-place, Portman Square. At the same meeting the following gentlemen were admitted Fellows, by election:—Selwood, Josiah Henry, Ampton-place, Gray's-inn Road; Webber, Charles Samuel, Connaught-square. The following Members of the College were admitted Licentiates in Midwifery on the 8th of June:—Akerman, William, St. Just, Cornwall; Baker, George Benson, Bayswater; Broughton, Henry Todd, Bradford, Yorkshire; Lucey, William Cubitt, Bermondsey; Mills, Samuel, Brompton Consumption Hospital; Oliver, George, Bourne; Puzey, Channey, Surrey-square, Old Kent-road; Reade, Albert Comberbach, Congleton; Richards, Frederick William, Winchester; Salter, John Henry, Arundel, Sussex; Viant, Henry, Totton, near Southampton.

APOTHECARIES' HALL.—The following gentlemen received the Licence on June 2nd:—Casey, Edward, King's College Hospital; Churchill, John Foot, Poole, Dorset; Haycock, Charles, Hackney-road; Pearson, Edwin Bold, Yeaveley, near Ashbourne; Salter, John Henry, Arundel, Sussex; Squarey, Charles Edward, University College Hospital; Viant, Henry, Guy's Hospital; Wey, William John, Edgecumbe-street, Stonehouse; Williams, David Martin, Camborne, Cornwall. On the same day, Messrs. Henry Denne, Algernon Ewen, and John S. Perkins, all students at Guy's Hospital, passed the first examination.—June 9th. The following Licentiates were admitted:—Broughton, Henry Todd, Bradford, Yorkshire; Holden, John, Ardwick Dispensary, Manchester; Maundrell, Edward, Rutland-street, Hampstead-road; Pearse, George Edmund Legge, Regent-street, Westminster. On the same day, Charles Meymot Tidy passed the primary examination.—On June 16th, the following gentlemen were admitted to the Licence:—Dawson, Henry, Church-road, Islington; Franklin, Charles, Maida-hill; Hawkins, Edmund Woods, Commercial-road; Jones, Benjamin, Llangefni, Anglesea; Moss, Charles, St. Helena; Puzey, Chauncey, Surrey-square, Southwark; Shaw, Charles Edward Martin, York-street, Portman-square; Snell, Ebenezer, Plymouth. On the same day, the following gentlemen passed the first examination:—Nowell, Richard, Guy's Hospital; Nunneley, Frederick Barham, University College; Tayler, George Christopher, St. Bartholomew's Hospital; Weeks, Henry, Guy's Hospital.

MEDICAL VACANCIES.

ST. MARY'S HOSPITAL, MANCHESTER.—For an Assistant House-Surgeon. Salary, £40, with board and lodging. Application to be sent, on or before July 2nd, to the Honorary Secretary.

BIRMINGHAM LYING-IN HOSPITAL.—For a Resident Surgeon. Full particulars to be obtained of the Secretary.

QUEEN ADELAIDE'S DISPENSARY, BETHNAL GREEN. — For a House Surgeon. Salary, £100 per annum, with furnished apartments, coals, and light. Applications to be sent on or before July 4th, to the Honorary Secretary. Election fixed for July 8th.

DARTFORD UNION.—For a Medical Officer for the District No. 2 B, comprising the parishes of Crayford and Erith. Salary, £55 per annum, with the usual Poor-law extras. Election on July 2nd; testimonials to be forwarded to the Clerk to the Guardians on the previous day.

CRANBROOK UNION.—For a Medical Officer for the Frittenden District. Population, 898; area, 3,318 acres. Salary, £25, with Poor-law extras. Applications to be sent before July 12th, to the Clerk to the Guardians.

APPOINTMENTS.

ARCHIBALD, J., Esq.—Medical Officer for the parish of Dalry, Ayrshire.

BRODIE, M., Esq.—Medical Officer for District No. 6 of the Bellingham Union, Northumberland.

BUTCHER, H. O. F., Esq.—House-Surgeon to the Clayton Hospital and Wakefield General Dispensary.

DAVIDSON, A., M.B.—Resident Medical Officer to the Bradford Infirmary and Dispensary.

DAVIS, W. H., M.D.—Medical Officer for the Checkley District of the Cheadle Union.

FOWLER, J., Esq.—Honorary Surgeon to the Clayton Hospital and Wakefield General Dispensary.

FRY, J. W. Esq.—Medical Officer to the Thaxted District of the Dunmow Union.

GARDNER, R., M.D.—Medical Officer for the Johnstone District, Paisley.

GIBSON, R. C. Esq.—Resident Medical Officer to the Jersey General Dispensary.

GRIFFITHS, G., Esq.—Medical Officer to the Milford District of the Haverfordwest Union.

HAWKEN, C., St. Aubyn, Esq.—House-Surgeon to the Westminster Hospital.

HUTTON, E., M.D.—Secretary to the Royal College of Surgeons, Ireland, for the year 1864-65.

ISDALL, J., M.D.—Examiner in Midwifery at the Royal College of Surgeons, Ireland.

JACOB, A., M.D.—President of the Royal College of Surgeons, Ireland, for the year 1864-65.

JONES, J., Esq.—Medical Officer of the Festiniog Union, Merionethshire.

MAPOTHER, E. D., M.D.—Professor of Hygiene at the Royal College of Surgeons, Ireland, and Medical Officer of Health for the city of Dublin.

MATTHEWS, B. F., Esq.—Medical Officer for the No. 3 District of the Stow Union.

MILES, G., Esq.—House-Surgeon to the South Devon and East Cornwall Hospital, Plymouth.

PEARSE, G., Esq.—House Physician to the Westminster Hospital.

PRICE, R., Esq.—Medical Officer to the No. 8 District of the Wycombe Union.

SPENCER, H., Esq.—House-Surgeon to the Bradford Infirmary and Dispensary.

SPURGIN, F. W., Esq.—Medical Officer for the No. 5 District of the Fulham Union.

- SUTCLIFFE, W. H., Esq.—Physicians' Assistant at the Manchester Royal Infirmary.
- SUTHERLAND, W., M.D.—Medical Officer for the No. 2 District of the Bellingham Union, Northumberland.
- TAYLOR, J., Esq.—Medical Officer for the Ticehurst District of the Ticehurst Union, Sussex.
- TICKLER, R. P., Esq.—Medical Officer for the Tetford District of the Horn-castle Union, Lincolnshire.
- TURNER, J., M.D.—House-Surgeon to the Dumfries and Galloway Royal Infirmary.
- WATTS, H. N., M.D.—Assistant Medical Officer to the Nottingham County and Borough Lunatic Asylum.
- WEBSTER, T. B., M.D.—Medical Officer for the Parish of Bracadale, Isle of Skye.
- WOODMAN, W. B., M.D.—Resident Medical Officer to the London Hospital.

DEATHS.

- BALY, George, M.R.C.S., Staff Assistant-Surgeon in the Army, at Warwick, on June 13, aged 33.
- DAVIS, John, M.D., Surgeon Royal Navy, at Bristol, June 17, aged 73.
- FOOTE, Richard Forde, M.D., on June 17, aged 37. The deceased was one of the special Physicians appointed by the General Board of Health during the cholera epidemic in 1848-49. Subsequently he held the post of Medical Superintendent of the Norfolk County Asylum; and, in 1855, when the British Government sent out a small staff of Surgeons to the aid of the British Contingent under the command of Omar Pasha, Dr. Foote went abroad as a member of this staff. He served at Eupatoria, Varna, and in Mingrelia, and received the Queen's as well as the Sultan's Crimean medal. At the termination of the Crimean war, he married, and settled at Constantinople, where he practised as a Physician until the past winter. Failing health, and the loss of his wife, after a few days illness from scarlet fever, induced him to return to England. His illness became worse, and he expired on June 17. Dr. Foote was a man of great and untiring energy. During his residence in Constantinople he contributed numerous articles on medical practice in Turkey, to the "Dublin Quarterly Journal of Medical Science," and other articles to the "Journal of Mental Science," and various journals. In 1860, he established an English quarterly review, printed in Pera, and entitled "The Levant Review of Literature and Science," which he continued to edit up to the period of his leaving Constantinople. He also founded in Constantinople, the Local Association for the promotion of Social Science, in connection with the National Association for the promotion of Social Science. This association, of which he was the Secretary, has done great service in labouring to obtain an alteration of the vexatious quarantine regulations which are in force in the Turkish ports.
- FORBES, W. W., M.D., of Inverness, at Edinburgh, on June 2.
- FRANKLIN, F., M.D., at Leamington, on June 25, aged 85.
- GLASCOTT, J., M.D., at Constantinople on June 2.
- HUNTER, Robert, M.D., at West George-street, Glasgow, on June 20. Dr. Hunter was for many years Professor of Anatomy, and afterwards Professor of Surgery in Anderson's University, Glasgow.
- LLEWELLYN, Ernest George Thomas, M.R.C.S., Surgeon to the "Alabama," on June 19. The deceased was a student at Charing Cross Hospital, from 1856 to 1859, and while prosecuting his studies there gained the

Silver Medals in Surgery and Chemistry. He was with the "Alabama" during the whole of her eventful career, and lost his life in the late action off Cherbourg, between the "Alabama" and the Federal ship "Kearsage." The following touching episode is related of his conduct after the "Alabama" was beaten, and as that vessel was going down:—"The whaleboat and dingy, the only two boats uninjured, were lowered, and the wounded men placed in them, Mr. Fulham being sent in charge of them to the "Kearsage." When the boats were full, a man who was unwounded, endeavoured to enter one, but was held back by the Surgeon of the ship, Mr. Llewellyn. "See," he said, "I want to save my life as much as you do; but let the wounded men be saved first." "Doctor," said the officer in the boat, "we can make room for you." "I will not peril the wounded men," was his reply. He remained behind, and sank with the ship—a loss much deplored by all the officers and men." It is contemplated by his fellow-students to erect a tablet to his memory in the hospital in which he had distinguished himself, and in which his kind and generous spirit had gained for him the greatest esteem and affection.

MACDOWALL, Alexander, M.D., at Helensburgh, Dumbartonshire, on June 10.

MILLER, James, F.R.S., F.R.C.S., at Pinkhill, near Edinburgh, on June 17.

Professor Miller was born at Monikie, near Dundee, and after receiving the usual home education, he went to St. Andrew's University, and thence to Edinburgh, where he resided for fifteen years as pupil, and subsequently assistant, with Liston, to whose practice he succeeded after Liston came to reside in London. In 1842, he succeeded Sir Charles Bell as Professor of Surgery in the University, and since that date he has held a foremost position as a teacher and practitioner. Professor Miller has written largely, but is best known by his work on the "Principles and Practice of Surgery," in two volumes, the fourth edition of which has lately been published, and was noticed in the June number of the MEDICAL MIRROR. He was also the author of the article "Surgery" in the last edition of the Encyclopædia Britannica; the "Surgical Experience of Chloroform;" "Lectures on Medical Missions;" "Physiology in harmony with the Bible respecting the value and right observance of the Sabbath;" "Labour lightened and lost;" "Abstinence, its place and power;" and various other works.

PENINGTON, James, M.R.C.S., at Needham Market, Suffolk, on June 6.

RHODES, Esq., Surgeon, at Garden-street, Newcastle, on June 6, aged 48.

SMITH, E., M.D., of Ilkley Wells House, near Otley, Yorkshire, on June 6, at Richmond, Yorkshire, aged 59.

WALLACE, William, M.D., late of the 14th Regiment of Foot, at Morning-side, Edinburgh, on June 8.

BOOKS, ETC., RECEIVED.

"An Elementary Text-book of the Microscope." By J. W. Griffith, M.D., F.L.S.

"On Syphilitic Diseases of the Eye and Ear." By Jonathan Hutchinson, F.R.C.S.

"The Transactions of the Obstetrical Society of London." Vol 5.

"The Year-book of Medicine and Surgery, for 1863." (New Sydenham Society.)

"A Hand-Book of Uterine Therapeutics." By E. J. Tilt, M.D.

"Der Typische Frühsommer-Katarrh, oder das sogenannte Heufieber, Heu-Asthma." By P. Phœbus, M.D.

"On Change of Air in the Prevention and Cure of Pulmonary Phthisis." By John C. Thorowgood, M.D. *** A Reprint, with some additional Re-

marks, of Dr. Thorowgood's interesting paper contained in Nos. 4 and 5 of the MEDICAL MIRROR.

"Journal de Médecine Mentale," for May, 1864.

"The Pharmaceutical Journal," for June.

"The Social Science Review," for June.

"Gazette Médicale de Paris," for June.

"The Breath of Life ; or Mal-Respiration, and its Effects upon the Enjoyments and Life of Man." By George Catlin.

"Lectures ; chiefly Clinical." By T. K. Chambers, M.D. Third Edition.

"The Canada Lancet," for May, 1864.

* * We are glad to see that our little Canadian contemporary still flourishes, and we heartily wish it success. As it has now completed its first year of existence, it is time that the question of enlargement should be entertained, for the number of pages (eight monthly) can scarcely furnish sufficient mental pabulum for our Canadian medical brethren, amongst whom there is certainly sufficient talent for the production of a good-sized Medical Journal.

"Annales de la Société de Médecine d'Anvers." February and March numbers.

CORRESPONDENCE.

ON THE ETYMOLOGY OF SYPHILIS.

To the Editor of the Medical Mirror.

SIR,—Will you be kind enough, when space permits, to give insertion in your valuable periodical to the following derivations of the word "Syphilis." The origin of the word appears very obscure, as may be seen from the following quotations, and it would be interesting to know its exact origin ; perhaps some of your readers can supply more satisfactory information.

"Some derive it of $\sigma\upsilon\nu$, with, $\phi\iota\lambda\acute{\iota}\alpha$, love or friendship." (Bailey).

"The etymology of syphilis is unknown. Some consider it to proceed from $\sigma\upsilon\varsigma$, hog, and $\phi\iota\lambda\epsilon\omega$, 'I love ;' others, from $\sigma\upsilon\nu$, with, and $\phi\iota\lambda\epsilon\omega$, 'I love ;' and others with more probability from $\sigma\iota\phi\lambda\omicron\varsigma$, formed by contraction from $\sigma\iota\pi\alpha\lambda\omicron\varsigma$, 'a reproach, &c.'" (Dunglison).

"A term coined by Fracastorius, and introduced into nosology by Sauvages. Its etymology is unknown." (Imp. Dict. by Ogilvie.)

"The name of a shepherd who fed the flocks of King Alcithous, who, proud of their beauty, insulted the sun, as a punishment for which, fable relates, that this disease was sent on earth ; or from $\sigma\iota\phi\lambda\omicron\varsigma$, filthy (Hooper's Med. Dict.).

" $\Sigma\nu\nu$, together, $\phi\iota\lambda\acute{\epsilon}\omega$, to love" (Mayne). Now, according to Hooper, it has been stated that it is taken from the name of a shepherd, and according to the Imperial Dictionary, it is a word coined by Fracastorius. Which of these two statements is the correct one ?

I am, Sir,

Yours, &c.,

H. L. MAYSMOR, M.D., F.R.C.S.E.

P.S.—Hoblyn gives no derivation.
33, Mornington Road, N.W.

* * In consequence of the space occupied by Original Communications, we are compelled to defer an Article on "Assurance Companies," and some Reviews and other matter until the August number.

THE MEDICAL MIRROR.

AUGUST, 1864.

ORIGINAL COMMUNICATIONS.

The Ninety-first Anniversary Oration, delivered before the Medical Society of London, March 8, 1864. By J. L. W. THUDICHUM, M.D., M.R.C.P., etc.

[Concluded from page 425.]

THE British Pharmacopœia, if properly enforced, will avoid the occurrence of similar accidents by any of the agents which it enumerates. I therefore believe that it constitutes an achievement of the profession with which they may be well satisfied. I do not share the petty complaints which we now daily encounter as to the alteration of names, weights, or strength of solutions. These are formal matters of memory as easily acquired as laid aside. Improvements can be introduced as time advances, but I believe that they will be few and far between. This work is a practical necessity, and a compromise between three elements, each of which has good grounds for enforcing claims of superiority in at least some matters. It has been done by persons than whom none possess better qualifications for the task, and I am certain that the work has been well done. And as to the plaint that it has cost a few thousands of the funds paid by the profession for the maintenance of its representative organisation, I should stigmatise that as mean and below notice, and on the contrary rejoice, that in a profession which makes such continuous sacrifices in the shape of gratuitous services, a good work should have been amply rewarded. The circumstance that the English language was employed in its composition, is undoubtedly a convenience to most persons concerned, and will be influential in gradually causing a substitution of the English language for the obsolete Latin in physicians' prescriptions. The British Pharmacopœia stands on a level with the latest edition of the Prussian Pharmacopœia.

poeia, which was published last year, and is superior to the American Pharmacopoeia, also published in 1863, by the judicious exclusion of galenicals, which have no claim to any scientific recognition whatsoever. I hope that we may soon be unanimous in the opinion, that by the production of the British Pharmacopoeia the Medical Council have deserved well of the profession.

The progress of practical medicine during the past year has been very great, and has been particularly signalised by the discovery of the prevalence of a disease hitherto unknown. I allude to trichiniasis, or fleshworm disease. It made local outbreaks in northern Germany, and while affecting with greater or lesser severity several hundred persons, upwards of a hundred persons died of it. The prevalence of that disease in the parts just mentioned may certainly, in part at least, be attributed to the habit of the population of eating pork in a raw or underdone condition. But as the disease is by no means confined to those parts, but occurs in South and North America, as well as in this country, where it was originally discovered, and where the habit of eating raw meat does not prevail, we are constrained to assume that there are peculiar facilities by which the parasite in question escapes the protective operations of the culinary art, and insinuates itself as an animated poison into the human body. It is necessary to have counted, as I have done, twenty worms in a small piece of flesh no larger than a mustard-seed, in order to form an idea of the ravages which these animals commit in cases of infection of a high degree.

This result is due to the united efforts of morbid anatomists, zoologists, and practical physicians, and could not have been attained by the single-handed energies of any one of them. It illustrates forcibly one of the methods which we employ to better the condition of man. We find out the causes of diseases and teach the way to avoid them. Provided the precautions are effectual, there is no longer any necessity of searching for drugs to stay the disease, or destroy the animated poison. It becomes childish temerity to disobey the behests of science and risk a danger of such magnitude by eating improper food with less enjoyment than it would confer in a state of proper preparation.

Amongst the successes of the last year we may count the establishment of an institution which is not only of great hygienic value, but promises to be a useful instrument in the hands of the practical physician. Having taken an early interest in the introduction and therapeutical study of the Turkish bath, as evinced not only by a special communication which was read and discussed before this Society, but

also by the active share which I took in the establishment, by Mr. Urquhart and a body of supporters, of the Hamam in Jermyn-street, I should be the more anxious to report to you, did time permit, the nature and amount of success actually to be obtained by this agent in the treatment of disease, as the most exaggerated and unfounded preconizations of its universal healing power are now put forth by persons who have neither sufficient knowledge of that branch of natural science commonly termed physics, nor such insight into physiological and pathological processes as would qualify them to make objective therapeutical observations. Of a considerable number of observations which I have made, I will however show you two extremes.

In all cases of dropsy, particularly those forms which are connected with that form of kidney disease in which a large amount of albumen appears in the secretion, the bath acts as a curative, in so far as the dropsy is concerned, in all cases without exception. It is however necessary that hot air should be applied sufficiently long and sufficiently often. Some of the persons whom it has been my pleasure to advise from time to time, found this necessity so urgent, that they constructed baths near their own dwelling-houses. These they entered at least twice a day, and one of the patients at a critical period entered his hamam eight times in twenty-four hours. The application is equally beneficial in acute and chronic nephritic disease; but while in the acute forms, which do not rarely recover by the ordinary diaphoretic and other medical treatment hitherto in use, the albumen speedily disappears, in the chronic forms of some standing the albumen remains, notwithstanding the speedy disappearance of anasarca and ascites, and all hydræmic conditions. Whether or not recovery will take place in these cases has to be learned by future experience. It is sufficient meanwhile to know that these persons need not die of the symptom termed dropsy, but may, on the contrary, enjoy life and attend to business.

In all cases of paraplegia, however, which proceed from structural disease of the spinal cord or brain, the bath is useless, so far as the progress of the disease is concerned. But in cases of reflex paraplegia, in which the starting point of the irritation, which by reflex action produced the paraplegia, was on the surface, say on the skin of the feet, the immediate effect of heat was not only not inert, but highly injurious, and in one case which I had the opportunity to observe, though not to treat, through the courtesy of one of our foremost physicians, it brought on a distinct attack of hemiplegia. It must be satisfactory to know that this hemi-

plegia was symptomatic, and yielded to treatment without leaving any traces.

I could multiply the evidence on either side, and adduce cases of phthisis, cancer, neuralgia, hydræmia from chlorosis, and others, in which considerable symptomatic relief or a great improvement of the general health, without any abatement of the essential disease, was obtained. But I could also point out a considerable number of cases of the above categories in which no particular change was effected, and others in which, on account of injurious consequences, the use of the hamam had to be discontinued.

What then becomes of the vaunts put forth in advertisements, that this hamam will relieve, when it does not cure, all disorders? That if it be serviceable in any case, it is serviceable in every case? Such vaunts, to use the words of Boerhave, are empty smoke and idle ostentation. They have no better foundation than the assertions by which they are accompanied, that the faculty had met the discovery of the circulation with indifference, or made undue opposition to the introduction of the practice of inoculation, or that the practice of inoculation came from the Turks. The faculty honoured the discoverer of the circulation with the highest favours which it was in their power to bestow. The faculty properly opposed the introduction of inoculation, as although it benefited individuals, it damaged the condition of the community. And when the faculty relaxed in its opposition and divided into opposite camps, it was because the labours of Dimsdale and of the Suttons had removed many of the objections to inoculation, which up to their time unquestionably existed. And as to the origin of inoculation, it is not even a tradition, much less an invention of the Turks, although Lady Montague brought it from Constantinople to England. It was at the beginning of last century practised in the East by Greek physicians, who had received it from the Armenians, who had in their turn received it from the Hindoos, who again had received it from the Chinese. Lockhardt, in his translation of an ancient Chinese work on inoculation, has shown twenty years ago, that about the year 1,000 after Christ inoculation was a common practice amongst the Chinese. Thus while the Turks, with great good sense, preserved the Roman bath, they were by no means instrumental in bringing inoculation from Asia to Europe, and I know sufficient of them to believe and to say, that they have a more correct appreciation of the value of their bath and of the value of inoculation, than many of their occidental apologists.

I take this opportunity to point out that the practice of

the hamam as existing in England, is by no means the practice of the Turkish hamam only, but includes the addition of Irish hydropathy, in the shape of cold douches or plunges in cold water tanks. Now many may, and several do actually like this Frankish addition; others only suffer it with heroism, and because they believe it orthodox; some do not like it, and to not a few it is injurious. Upon sick persons it should, as a rule, be omitted, and applied exclusively with due discrimination. And I will give you this private hint, that if you want to know the actual practice, upon their own bodies, of those who most insist upon the necessity of this cold plunge, you should pry a little about the hot chambers of their haunts. There the old foxes will sit and smile at the shivering plungers, while they themselves will not, as true pharisees should, allow cold water to touch their bodies by any chance.

Mr. President and Gentlemen,—The practice of medicine includes the knowledge and practice of so many sciences,—among them that most difficult of all acquirements, the knowledge of the world,—that it can hardly be termed a science of itself. It is not in its nature that its practice should be exact, in the sense in which we apply this adjective to the physical sciences, for it is necessarily conjectural in many instances, especially in the recognition of mental conditions, even in sane persons, and of their influence upon the body. It is however, daily becoming more exact, by the application to the chemical and physical man of chemical and physical methods of inquiry. And this application will constitute the work of the future, and to its results we have to look for a solution of those questions which, like that of the curability of consumption, typhus, cancer, and other plagues of humanity, have so often been agitated in vain. But results can only be achieved by a combination of dexterity and knowledge, such as is only obtained by special training of special ability, and that ability in the possession of an ample fortune. Even such facilities have hard conditions of success to satisfy, and it is to some of these that I will shortly draw your attention, by an extract from a manuscript which has never left my desk:—

“Of cancer, the poisonous ferment is developed everywhere in Europe, and at all times; it is handed down through a century from generation to generation; its advent is insidious, because imperceptible, and even the local outbreak which first fixes the attention of the sufferer, betrays itself by pain only after having reached a certain degree of development. From this affliction there is no escape in the ordinary succession of events; death is certain, and its pang is inflicted hundredfold, being ever impending, but long deferred.

The frequent spark of hope is as frequently extinguished. To call life so encumbered a martyrdom, might be termed a mockery, for it is made up of suffering without an object, and has not got the redemption of a holy cause which martyrdom implies. Ten thousand deaths in every decade of years, indicate the cotemporaneous existence of many more thousand lives made miserable by this affliction. To poisons there are antidotes, to fevers specific medicines; a fatty tumour may be removed for good, gallstones be discharged, jaundice subside, dropsy may yield to remedies, even consumptive lungs may heal or cease consuming life; to cancer only there is no specific, nay, not even symptomatic, relief. Defying alike the physician's drugs, the surgeon's knives and caustics, and all ingenuity of empiricism, it stands unfeeling and masked, like an executioner on the scaffold, unmoved by the anguish of the victim, or the terror of the beholders.

"There is, however, a consideration affording relief, and it is one which will present itself to the eyes of science alone. It will bring no solace and no night's rest to the sufferer; it affects not his particular case. It is presented to us by geography, and is collected by the statist. It consists in the knowledge that particular spots are included within the reign of the disorders, while there are independent regions of the earth not acknowledging its supremacy. From the moment, therefore, that we have ascertained that there are countries where this malady does not prevail, it is impossible to avoid the conclusion that its presence is coincident with or dependent upon particular causes not inherent in our nature. Doubtless they will not obtrude themselves upon observation, since they must be coincident with, or consist in, habits that are common. It therefore remains, first to ascertain whether the distinction be real, and in that case to examine the habits of the countries, and of the times where cancer has either been unknown or is unfrequent, in order, by the aid of the contrast, to get at those habits from which it springs.

"The keenest imagination, in its wildest flights, could not have fallen upon the extraordinary relations of this disease which have been brought to light in this attempt, by a patient combination of testimony. A comparison of the frequency of cancer in Europe, with the numbers in which it is observed in the other four continents, has yielded unshakable evidence, that in the former a greater proportion of the population are victims to this disorder. That leading portion of the ancient world which is brought within the scope and observation of therapeutic science by being ruled from London, presents to us at once the largest field on which to establish the comparison, and the accurate means to establish it. A

population equalling, if not surpassing that of Europe, is here under the direct observation of the medical officers of an army scattered over the whole country. Frequently appealed to for relief by the natives, the representatives of European science had here frequent and splendid opportunities for observation. Yet few were the opportunities afforded to them of removing cancerous tumours. Even the capital of this empire, where the offsprings of the mixture of races are more numerous than elsewhere, does not either in private practice or the practice of the hospitals, furnish any exception to the rule, that cancer is extremely rare in India."

Such preliminary results have at once shifted the inquiry after the nature of the agent, which causes such a prevalence of cancer in Europe from the confined field in which it has hitherto been kept, upon higher and wider grounds. Before this we have searched the history of the life of individuals, for prominent incidents which might throw a light upon the mystery of their suffering. But the causes which were alleged by the one were contradicted by the very next analogous case; one after the other the anamnestic suggestions had to be abandoned. Cancer was found not to be caused by want, nor by luxury; it did not owe its existence to destitution of clothing, nor to superfluity; whatever share drunkenness might have in the production of the deterioration of our race, cancer could not be brought home to it; as little did ample food and exercise appear either to cause or to prevent it; the palace and the lowest hovel harboured alike the conditions of its production.

Cancer is a disease to which a certain constitutional degeneracy makes most liable; it is a disease of degeneracy, not of individuals only, but of races. But this degeneracy is itself a result required to be accounted for by ulterior causes, and these causes we must ascertain by a direct study of the circumstances which result in our suffering.

Walshe has given words to his apprehension, and has identified the agency which produces cancer with "the more wasting influence of the higher state of civilization." Such an influence would make civilization by no means a desirable condition, even were civilization without it a definition of an existence. But things cannot be explained by abstractions, much less by terms of such compound meaning, as that conveyed in a gradation of civilization, and we have, therefore, to dismiss the phrase, as we have also to dismiss the hallucinations of that verbose pathological system, which describes terrestrial yellow fever and hooping-cough as "cosmic diseases," as if they had been espyed among the inhabitants of distant worlds, and were common to them all; as if the short-

comings of human life had not each a terrestrial ascertainable cause; as if scourges were ruled by the stars, diseased minds by the moon, and the destinies of man were determined by passages of planets.

Some pathologists, who derive their notions of disease from the study of morbid anatomy,—foremost amongst them James Paget,—having scrutinised cancer and allied malignant tumours, and having recognised that they all seem purposeless or hurtful, and by violences against nature lead to early deaths, have taken refuge to “faith in Divine purposes, consistent and continuous, stretching far beyond the horizon of this life,” and have even expressed their ability that “amongst the certainties of the future” they could “see fulfilled the intention of the discipline of sufferings that only death might mitigate.” But as they did neither reveal the intentions of Providence nor the nature of their fulfilment, they by such a sentiment simply made confession of a kind of fatalism, which conveniently substitutes God’s will when their means end. I have known a religious spinster of a much more consequential mind than those medical fatalists. Her argument was, that as all suffering was sent by God for the discipline of His creatures, it was impious, because perverse of his ordinations, to oppose in thought or act any corporeal affliction whatsoever. To her the physician’s calling was ungodly, if it amounted to the exercise of more than prayer by the bedside of the patient. Though living with her nephew, a physician, she never used any remedy for the relief of a terribly painful cancerous tumor, which tortured her for many years. She was entangled in the same primary fallacy as the religious martyrs of their own will, the Hindoo Fakirs, as the despaired men of science; but unlike them, she carried her conviction to a consequential issue. If God dispenses cancerous tumours to lead men to godliness by pain or early death, or to warn others by untimely deaths to become timely wise, then all those processes which surgeons adopt to prevent, extirpate, remove, change, diminish, or reduce these dispensations or mitigate their pangs, are in direct violation of God’s commands, and a mockery of His omnipotence. Not one of the followers of this doctrine have drawn any other limits to human help than human ability; but they confound their inability with especial acts of Providence.

If I have thus in aphoristic fragments, upon a complicated problem, pointed out the nature of the inquiry which we shall have to institute and also the direction which, in part at least, it has to take; and if I have exhibited upon the essence of the labours and thoughts of two of our most illustrious authors and practitioners some of the difficulties which are in the

way of a chemical and physical inquiry of cancer, as of disease in general, I have done so for the only purpose which could justify it in your eyes, namely, to clear the way for the work to come. Thousands of busy hands and brains will have to join in the work, and not a small share of it will fall to the lot of members (present and future) of the Medical Society of London. May the number of these future friends be legion; we will receive them all with open arms. United then we shall meet the coming day, and give them a fair start upon the way of leading our time-honoured institution into a second sæculum of success.

Mr. President and Gentlemen,—If the raw levies of my thoughts have failed to satisfy you by their substance or performance, you will only pardon the temerity which has allowed them to perform. But if you are aware of any grounds upon which their shortcomings might in some degree be excused, you will give me the full benefit of them. For my part, I shall ever cherish the memory of, and be deeply grateful for, the confidence and consideration which prompted you to call upon me to commemorate, by an Oration, the 91st Anniversary of the Medical Society of London.

On Keratitis. By W. S. WATSON, F.R.C.S., Assistant-Surgeon to King's College Hospital; Clinical Assistant at the Royal London Ophthalmic Hospital, &c.

[Concluded from page 399.]

IN the third division, viz., that including all cases of Keratitis, depending entirely on constitutional causes, I have placed the group of *Hereditary Syphilitic Keratitis* first, as being at the same time the most characteristic of this division, and the most interesting on account of its having recently been described and distinguished from Strumous Ophthalmia. The description given of the disease by Mr. Jonathan Hutchinson is extremely accurate, and having taken notes of twenty-four cases, of most of which I have carefully watched the progress, I believe that the confirmation which I can thus give to his observations is of considerable value. Seventeen of these twenty-four were over the age of 9 years at the time of the commencement of treatment, and therefore afforded an opportunity of observing any peculiarity of the upper incisor permanent teeth, and in *three only* was there no indication of a syphilitic taint afforded by them; in the remainder there was either a notching or peg-shape of these teeth, or the two characters combined. In those cases in which neither the teeth

nor the physiognomy afforded any information, there was a history of a conclusive character in some, and actual disease in others; but I have ventured to include in the same group two cases in which there was no indication afforded from any of these sources; in which the teeth were good, the physiognomy and complexion good, and in which no history could be obtained at all leading to the supposition of an inherited taint. My reason for including these two cases, was the fact that the disease ran precisely the same course as in the others, and exhibited precisely the same phenomena. One of these cases was sufficiently characteristic in the succession and nature of the symptoms to induce me to relate it.

Case.—A boy $13\frac{1}{2}$ years of age, of fresh complexion, and tolerably well nourished, applied at Moorfields on April 14th, 1864, with interstitial keratitis of both eyes.

He is an orphan, but has a sister 10 years of age, who is in good health. His teeth are well-formed and close-set, and there is nothing peculiar about the form of the face or nose. His aunt states, that as an infant, he had erysipelas in the head, and was ailing for two years. For two or three months past he has been restless at night and subject to nocturnal headaches, and about a month ago his right eye became inflamed, a few days after his left also became affected. On admission, both corneæ presented a ground-glass appearance, the opacity lying evidently in the substance of the corneal tissue, and being arranged in the form of a ring so as to leave a somewhat clearer space in the centre, and a circle of transparent cornea at the margin. The upper and lower segments of the right cornea were highly vascular, and this had also occurred to some extent in the left. He complained of pain of a stabbing kind occasionally, and had some photophobia. The treatment consisted in giving a combination of syrup of the iodide of iron and cod-liver oil internally, and applying lead lotion externally, with occasional atropine drops. The vascularity extended in both eyes until nearly the whole surface of each cornea was covered; but leaving a clear space at the inner and outer sides, so that the vascular space assumed an hour-glass form. On May 11th, there was some improvement; on May 18th the vascularity had nearly disappeared; on June 1st there was slight vascularity of the right cornea, and in the left only a central nebula, and there was some bulging of both in the central regions; June 15th, he is able to pick out letters in No. 20, with either eye, and the opacities are much diminished; June 29th, reads No. 19, nebula becoming fainter. This result, though far from brilliant, is satisfactory compared with what is frequently seen, and considering the time, during which he was under observa-

tion, only extended over about $2\frac{1}{2}$ months, I have no doubt that the improvement will continue. It is very common to see cases of this disease in which vision is so seriously impaired, that the patient can only just guide himself about, and in which an artificial pupil affords a somewhat doubtful prospect of more useful vision.

Of the remaining groups of the third division I shall content myself with a merely passing notice.

The cornea is so very rarely affected in the eruptive stage of small-pox, that the existence of the *primary variolous ophthalmia* has been denied, but I think one or two cases have come under my notice in which it seemed impossible to avoid the conclusion that a genuine variolous pustule had formed on the cornea.

In *rheumatism* I have seen the cornea secondarily affected in one or two cases, but as no special treatment apart from that of the original disease is necessary, I need not dwell upon the subject.

The cornea becomes affected only in common with the other tissues of the eyeball in *septicæmia* and *pyæmia*, and in low states of the system, such as *diphtheria*, and in all such cases there is a tendency to sloughing coming on very rapidly, and to the rapid destruction of the eyeball.

Aquo-capsulitis is the term applied to a form of iritis, in which there is a dotted opacity on the posterior elastic lamina of the cornea. It is yet disputed whether this disease depends upon a syphilitic taint or not.

In two cases, which I have seen, I was unable to satisfy myself that there was constitutional syphilis, though in both there was good reason for suspecting it. In both mercury was used with decided benefit.

In the advanced stages of chronic *choroido-iritis* the cornea becomes sometimes involved, but usually the original disease has by this time gone on too far to be within the reach of remedies, and therefore offers few features of interest.

Scleritis and *episcleritis* often extend their seat of inflammatory exudation beyond the limits of the tissues first affected, and the cornea may become partially or entirely covered by patches of exudation with numerous minute vessels ramifying in their substance. Such a condition is extremely difficult to deal with. It is generally associated with a gouty diathesis, and requires the remedies appropriate to that disease.

The *Diagnosis* of the various forms of keratitis will be materially aided in most instances by considerations relative to the age, condition, diathesis and other circumstances connected with the patient; but I shall only point out the ap-

pearances of the cornea itself which are sufficiently characteristic to be of use in distinguishing some of the diseases enumerated in this paper from one another.

Those of the first division, in which the inflammation has been set up by mechanical irritation, bear in most cases the cause of the disease conspicuously before them, and only require a careful search and a good light for its discovery. The rough vascular cornea occupying the upper half or two-thirds of its area, is an almost infallible sign that the lids are lined by granulations; if, on the other hand, the vascular condition occupy the outer part or the inner part of the cornea, the remainder being clear and transparent, the probability is that inverted eyelashes are the offending cause. In any case it is a good rule to evert the upper lid, and make a careful search in this locality, as by this means the cause of the mischief will often be discovered.

There does not appear to be any distinctive character peculiar to the *cphthalmia of scrofula*, but certain kinds of keratitis are more common in this disease than in other varieties, and perhaps the phlyctenules or vesicles filled with lymph of the size of a pin's head or millet-seed, are more commonly seen in scrofulous keratitis than in any other.

This phlyctenule is generally followed by an ulcer, the base of which is highly vascular, and is connected to the conjunctival vessels by a lash of newly-formed vessels.

The *catarrho-rheumatic* is only distinguishable, as a rule, by the constitutional symptoms with which it is associated, but the transparent ulcer, not uncommonly seen in this disease, is quite peculiar. It appears as though a portion of the cornea had been cleanly scooped out, without interfering with its transparency, and there is a singular absence of vascularity in the surrounding parts. The healing of this ulcer sometimes goes on without in any way altering its appearance, excepting that its depth diminishes as the newly formed granulations are deposited, till at length its base reaches the level of the surrounding surface.

In the *secondary variolous ophthalmia* a circumscribed deposit of pus in the corneal layers is almost always seen, but this must not be looked upon as a certain diagnostic sign, as the same thing may occur in traumatic, scrofulous, catarrho-rheumatic, and even morbillous ophthalmia.

The *keratitis of inherited syphilis* is marked by the absence of ulceration and by the interstitial position of the opacity; as also by the peculiar course through which it runs. In a typical case seen at the commencement, the cornea has a steamy appearance principally in the centre, and at first in one eye only. The vascularity of the sclerotic is little or

not at all increased. Soon the centre of the cornea becomes thicker, and assumes an appearance resembling ground glass, the surface, however, being perfectly smooth and polished in the great majority of instances; the margin still remains comparatively transparent; at a later period the upper part of the cornea becomes highly vascular, the vessels often terminating by a distinct horizontal line; a similar vascular state of the lower half soon makes its appearance, and the two planes of vessels at length meet in the centre. In some cases the blood-vessels are so closely arranged and so full of blood that the appearance to superficial observation is that of a drop of bright arterial blood lying in the substance of the cornea. Meanwhile the surface remains unaffected, and generally the outer and inner margins continue transparent. Under favourable circumstances the vascularity subsides and the opacity gradually diminishes, generally leaving a considerable protrusion of the central region. These phenomena are so peculiar, and the regularity of the sequence is so marked, that it is impossible to confound this disease with any of the others enumerated. For a more detailed account of this affection I must refer to Mr. Jonathan Hutchinson's papers in the *Ophthalmic Hospital Reports*, vols. i. and ii., in which the whole subject is treated in a masterly and most exhaustive style.

With regard to the diagnosis of the varieties of inflammatory affections of the cornea comprising the remainder of the third division, those, viz., dependent upon different blood-poisons, and generally associated with other and deeper lesions of the eyeball, I think that the remarks already made are sufficient. I would especially call attention to the short descriptions given of *aquo-capulitis* and *episcleritis* as affording a guide in diagnosis in each.

Treatment.—Few general rules can be laid down on the subject of treatment of diseases so diverse in their etiology and pathology, as those included in the preceding pages. It is obvious that in most cases general principles will be the best guide in the treatment; but at the same time, I believe, it will be found that in the majority of instances in which the cornea is inflamed, there are certain principles applicable to all, irrespective of the origin or extent of the morbid process. Thus, as a rule, depletion either locally or from the system, is not well borne unless, in addition to the keratitis, there is iritis or deeper mischief. Excessive pain sometimes seems to indicate the withdrawal of blood from the neighbourhood of the inflamed organ, but, I believe, in most cases this symptom is much more effectually relieved by other means.

Mercury, again, is contra-indicated in all cases of pure keratitis, unless, perhaps, in alterative doses.

Sedatives and tonics are nearly always useful.

But while we may regret that so little can be done in the way of laying down rules applicable to a large number of different diseases, we may at the same time congratulate ourselves that in many special cases, special points of practice have been found to be very efficacious, not only in counter-acting symptoms, but frequently in bringing about a cure of the disease.

I shall not, therefore, attempt to give a detailed account of the treatment adapted to each particular kind of keratitis, but shall content myself with pointing out what are those points of practice which I have found to be most useful, or which have been favourably spoken of by the best authorities on this subject.

In the treatment of cases belonging to the first and second divisions, in which there is a purulent discharge from the conjunctiva, it is of the utmost importance to check this by astringent applications, as quickly as possible. In purulent ophthalmia, whether gonorrhoeal or in infants, the main point in the treatment consists in the frequent washing away of the discharge, and the astringent applications. It is not sufficient merely to drop an alum or nitrate of silver collyrium into the eyes; but the discharge must before each application be thoroughly washed away by means of a syringe, and it is better to use a syringe for the purpose of injecting the astringent. Hot applications and poultices are positively injurious in such cases. They keep the parts unduly heated and prevent the proper escape of the discharge, which is the great desideratum.

Granular lids and the associated rough *vascular cornea* must be treated by different methods in different stages of the affection. In the less severe forms, I have found great benefit result from everting the lids, and applying a strong solution of nitrate of silver (a scruple to the ounce of distilled water) with a camel's-hair brush, and then while the lids are still everted, washing away the superfluous nitrate with clear water. This is repeated twice a week, and most patients on whom this has been tried, have derived great benefit from it.

If the granulations are very large and fleshy, the solid stick of nitrate of silver may be applied, taking care to wash the everted lids immediately afterwards. Under similar circumstances, the finely powdered acetate of lead dusted over the surface and rubbed well into the granulations, and washed off with clear water, has answered well in my hands.

When the cornea is completely covered by a vascular opacity, associated with granular lids, I think it quite justifiable to treat the case by inoculation, as has been done so successfully by Dr. Bader, or by combining the method of inoculation with a previous excision of the portion of conjunctiva immediately surrounding the cornea, as has been recently done successfully by Mr. Lawson. It must be borne in mind that such treatment is liable to be followed by sloughing of the cornea, and consequently by destruction of the eye, and it should, therefore, only be employed in cases in which there is *complete pannus*. Some of the worst cases have been followed by the best results.

Treatment of *Photophobia* in *Scrofulous Keratitis* and other ophthalmia. —The obstinate intolerance of light in keratitis has been treated on various plans. Some have kept their patients in a darkened room, but this is objectionable on the ground that the general health must suffer from the confinement, and this is particularly the case with strumous and weakly children, who require all the air they can get, and on whom the direct rays of the sun exert a remarkably restorative effect. The same objection cannot be urged against the use of a shade, and the best form of shade is one made of stiff brown paper, large enough to shade both eyes, and allowed to stand well out from the forehead. Atropine and belladonna, however, are most valuable remedies in this disorder; the sulphate of atropine dissolved in water (4 grs. to the fl. oz.) may be dropped in once or twice a day; or the embrocation of belladonna and glycerine may be smeared on the temples and brows; or the atropine papers or atropised gelatine may be used for the same purpose.

Where there is much lacrymation, the belladonna embrocation is preferable to the other plans. In two cases I have injected a few drops of solution of atropine under the skin of the temple with very rapid relief of the intolerance. When ascarides or intestinal irritation of any kind is present, no local application will avail until a brisk purgative has removed the irritation of the bowel. This is a frequent source of photophobia in children, even when there is no affection of the cornea.

Failing other remedies, counter-irritation should be had recourse to either by blisters behind the ears, by setons in the temples, or by the application of caustic to the mucous membrane of the nose.

Blisters are objectionable in very young children, and not often required in such patients. Setons in the temples are more particularly serviceable in that peculiar variety termed phlyctenular, especially if it has gone on to the con-

dition of vascular ulcer. The application of caustic to the nostrils seems indicated when there has been previously a discharge from the mucous membrane of the nose which has been checked suddenly. Nauseating doses of antimony have been used of late by my friend Dr. William Price, of Margate, with great success in this troublesome affection. I have had no personal experience of this remedy, and fear that patients in London would not bear this treatment so well as those who have the advantage of the air of the sea coast, and the bracing influence of sea-bathing. This latter remedy must still be looked upon as *the remedy par excellence* for strumous ophthalmia, as for other strumous affections, taking care, however, that the patient is not exposed to the glare of the reflection of the sun's rays from the surface of the water.

In the *onyx* or deposit of pus in the substance of the cornea, which is not unfrequent in the course of severe keratitis, and generally associated with a deposit resembling pus in the anterior chamber, it becomes a question whether there is any prospect of benefitting the patient by operative interference; and if so, what are the indications for the choice of operations and the cases most suited to such a plan of treatment. The cases most likely to require any operation, are those of kerato-iritis, resulting from injuries, in which, besides the presence of pus in the substance of the cornea, and in the anterior chamber, there is increased tension of the eyeball, and great pain in the eye and surrounding bones. In such a case, possibly a mere puncture of the cornea at the margin may have the effect of relieving the symptoms; but if not, it may be repeated several times; or iridectomy may be performed, and if after the first puncture the relief is of very short duration, it will be better to proceed at once to remove a portion of the iris, especially if the patient happen to be an elderly person or subject to rheumatism. But I do not agree with those surgeons who deny the propriety of performing paracentesis of the cornea unless there be increased tension. The only necessary symptom, in my opinion, is constant and extremely severe pain; and I am quite sure that this operation is appropriate in many more cases than it is usually employed in, and that many eyes have been lost in consequence of its being delayed or neglected.

In cases of *sloughing ulcer* from any cause, and especially in the course of catarrho-rheumatic ophthalmia, I have seen great benefit result from a well-timed iridectomy. The effect in some cases has been marvellous from its rapidity and its completeness.

The treatment of *interstitial keratitis of hereditary syphilis* is still a matter *sub judice*. According to Mr. Jonathan

Hutchinson, it should be treated by mild specifics, *i.e.* by mercurial inunction to the temples, and iodide of potassium internally. Other surgeons, and myself among the number, are in favour of a more simple plan. I believe that in many cases mercury is not well borne by the subjects of this disease, and as far as my experience goes, treatment by syrup of the iodide of iron and cod-liver oil is quite as successful as any other plan; but I am quite ready to allow the experience I have had is limited. For a detailed account of some of the cases of this affection under my observation at Moorfields, and at King's College Hospital, I must refer to the coming number of the Ophthalmic Hospital Reports.

On Enlarged Tonsils, and their Treatment without Cutting. By MORELL MACKENZIE, M.D., London, Member of the Royal College of Physicians. (Two Lectures delivered at the Dispensary for Diseases of the Throat.)

LECTURE I.

GENTLEMEN,—The subject which I have to bring before you to-day is one, which to some may appear unimportant, but which to those who have had much acquaintance with throat-ailments, and especially to those who have attended the practice of this dispensary, must appear worthy of the most careful investigation. On the present occasion the inquiry must be confined to the chronic form of hypertrophy,* for the acute enlargement is of so different a character and requires such entirely different treatment, that its consideration must be deferred to a future time.

The numerous inconveniences—it would not be too much to say the actual suffering and positive danger—caused by the presence in the throat of enlarged tonsils, has led at different times to various therapeutical efforts for their reduction.

The general experience of the profession, however, has certainly not been favourable to the topical agents strongly recommended by some practitioners. Hence these have almost altogether fallen into disuse, and patients have either had to submit to the many annoyances incident to enlarged tonsils, or else to a surgical operation for their removal.

This subject is brought under your notice with special reference to its therapeutical aspect. The pathology and

* This term is used synonymously with enlargement. No pathological theory is attached to the expression.

ætiology of the disease will therefore be only considered inasmuch as they exemplify the kind of treatment required and the necessity for adopting it. The points to which your attention must especially be called are—

1st. The morbid effects produced on the constitution by enlarged tonsils.

2ndly. The objections to the surgical operation.

3rdly. The consideration of a new and safe mode of reducing the size of the tonsils.

Before detailing the consequences of enlarged tonsils, it would perhaps be well to take a passing glance at their causes. It is now generally admitted that chronic hypertrophy of the tonsils is one of those slow changes, one of those sub-inflammatory processes, dependent on the strumous diathesis. That the disease is common among the young, rare among adults, and scarcely ever met with in old people, is explained by the greater activity of the secreting (glandular) system in early life. I have observed that the children of phthisical parents often suffer from enlarged tonsils, and I believe that this fact has been noticed by others, though I am unable to recall exactly where. Chronic enlargement of the tonsils sometimes remains after the subsidence of an acute inflammatory attack. This is a rarer cause of the disease, but in the case of adults the disease sometimes originates in this way.

With regard to the pathology, it is generally believed that an exudation takes place which undergoes a low form of development. The density of the enlarged gland is in proportion to the degree of organisation of the exudation. Generally the diseased tonsil is soft and almost friable, but sometimes a strong fibrous tissue is formed and the gland attains the hardness of gristle. There is considerable difficulty in tracing the minute pathological changes which take place in this disease, and Dr. Andrew Clark, who has made more than 800 sections of healthy and diseased tonsils, informs me, that the histological changes are involved in considerable obscurity. After this admission from so indefatigable and accomplished a microscopist, we may well be excused for not entering deeply into this part of the subject, more particularly as it bears no relation to treatment. It may be remarked, however, that the true secreting surface of the glands is probably diminished, and that the exudation by pressing on the small vessels, no doubt impedes the circulation.

The morbid effects produced by enlarged tonsils will now be briefly considered. A well-known French surgeon (M. Chassaignac) goes so far as to say "*l'hypertrophie amygd-*

daliennne est une des entraves les plus fâcheuses au développement physique et moral de l'individu."* That enlarged tonsils "are a great obstacle to moral development" seems rather an exaggeration, but there can be no doubt that they are seriously opposed to the growth and strength of the body. The evil effects produced on the vital powers by enlarged tonsils were pointed out by Dr. Yearsley more than twenty years ago; and those who wish to investigate the subject carefully, will do well to peruse that author's able work.†

On the *respiratory process*, enlarged tonsils, by interfering with the free current of air, exercise a very baneful influence. It is needless to observe that the evil is not confined to the pulmonary system; the blood necessarily becomes imperfectly oxygenated, and hence in those of strumous constitution, where the proper aëration of the blood is of the greatest importance, the very opposite condition is brought about. I am not unmindful that the great founder of modern pathology (Rokitansky) considers that enlarged tonsils are unfavourable to the development of phthisis. No doubt enlarged tonsils are rare amongst patients suffering from pulmonary phthisis, but with all deference to the distinguished German authority, it appears to me, that the explanation of the non-development of pulmonary phthisis in persons affected with enlarged tonsils, must be sought for, in the pathological correlation between strumous disease of the glandular system and lung-consumption, rather than in the theory, that the imperfect aëration of the blood is opposed to the tubercular crasis. On the *tonsils themselves* the enlargements react in a very injurious manner. The large size and low organisation of the glands, renders them very liable to repeated attacks of acute, or sub-acute inflammation. Patients with enlarged tonsils are often so susceptible, that inflammation of those glands follows the slightest exposure and comes on with the mildest catarrh. These frequent attacks of quinsy not only cause much suffering, and augment the size of the tonsils, but when the already hypertrophied glands become still further enlarged by inflammation, there is often risk of suffocation. It may be well to bear in mind also, that *the danger of scarlatina, diphtheria, croup, and laryngismus stridulus, is of course greatly increased* by any pharyngeal impediment to respiration. *The extremely disagreeable intonation of voice* caused by enlarged tonsils sometimes makes an effort to lessen the defect very desirable. The voice is sometimes nasal in its tone, sometimes merely thick, or muffled, more rarely guttural.

* Leçons sur l'hypertrophie des amygdales, p. 23.

† On Enlarged Tonsils and Elongated Uvula.

The varying modification in its character depends, as Dr. Yearsley has pointed out, on the direction (posterior nares or laryngeal aperture) towards which the bulk of the tumour extends. This peculiarly unpleasant modification in the voice is often so serious a drawback to young people, as to make them very anxious to overcome it. Snoring is another objectionable peculiarity, sometimes caused by enlarged tonsils.

Chronic disease of the larynx is often associated with, if not caused by, enlarged tonsils. When the lower part of the gland is much enlarged, it often presses on the epiglottis, and in that way excites laryngeal irritation. In chronic laryngitis and in follicular disease it is often impossible to effect a cure, till the tonsils have been removed or destroyed. Aurists tell us that deafness is sometimes due to enlarged tonsils, and some authors regard them as a cause of indigestion. That they interfere with deglutition is evident, but that they seriously affect the digestive function is contrary to my experience. In many diseases of the pharynx, it is well known, that the vitiated secretions pass down into the stomach, and give rise to chronic irritation of that organ. The ordinary indolent enlargement of the tonsils is not generally attended either with an excessive or a greatly altered secretion. Slight cerebral disturbance, and consequent headache, have been thought to result from the obstruction to the free circulation caused by the enlarged tonsils. Some cases have come under my observation, which favour this idea. It has been stated, also, that stammering is due in some cases to this cause; and I can call several instances to mind, where stuttering appeared to have arisen in this way. It is especially liable to affect young children who are learning to articulate. Though, where the habit of stammering has been acquired, the removal of the tonsils does not accomplish a cure, it certainly greatly facilitates the curative process, and some cases permits it, where it would otherwise be impossible. Nevertheless, the cases in which enlarged tonsils cause veritable stammering, are comparatively rare. The evil effects produced by enlarged tonsils have been enumerated in the order of their importance. To recapitulate briefly: the conditions which call for interference with the size of the tonsils are—the injury to the constitution caused by the insufficient supply of air, repeated attacks of quinsy, danger of suffocation, disagreeable intonation of voice.

The obstacles to the surgical operation of extirpation, are—(1) its dangers; (2) its difficulties; (3) the objections to it entertained by many patients. The difficulties raised by the patient are, perhaps, the hardest to overcome. As regards the actual danger of cutting out the tonsils, it cannot

be stated that this is great. According to the experience of most surgeons, the bleeding which follows a wound of the tonsils is not a matter of much importance. Nevertheless, cases have occasionally occurred, where the hæmorrhage has been not only serious, but even fatal. As regards the danger of wounds of the tonsils, the honoured President of the College of Physicians observes, "I must warn you that puncturing or scarifying the tonsils, is an operation not to be carelessly, or rashly, or wantonly performed. Portal mentions a case, in which a skilful surgeon, in scarifying the tonsil of his patient, wounded, as he supposes, some ramification of the internal carotid; and the patient was presently dead. The artery lies, as you know, very near the tonsil, and only a few years ago, in Ireland, it was struck by a surgeon while scarifying a gentleman's tonsil, and the gentleman died in three minutes."* It may be argued against this quotation, that in excision of the tonsils, the glands are drawn out before the knife is introduced, and that the danger of hæmorrhage is thereby greatly diminished. No doubt that is, to a certain extent, true; but when the tonsils are much enlarged, especially when both glands are affected, it is often impossible to draw them out to any extent. On this subject an eminent London surgeon remarks, that, "The hæmorrhage which follows this operation (extirpation) is generally very trifling, *but I have known it to be sufficiently abundant to endanger the patient's life.*"†

That the removal of the tonsils is not so simple and easy an operation as is stated by some authors, may be inferred from the numerous and complicated instruments which have been invented for its accomplishment, as well as from the great number of knives and bistouris that have been recommended.‡

The various instruments are difficult to employ where the tonsils are irregularly enlarged; indeed, they are only well suited for those of particular shape and size. Where

* Principles and Practice of Medicine. By Thomas Watson, M.D. Vol. i, p. 822.

† Science and Art of Surgery. By John E. Erichsen. London, 1864, page 880.

‡ Where the operation has to be performed, Mr. Luke's simple and ingenious guillotine is the best instrument that can be employed. The amygdalotome of M. Chassaignac, though of elegant construction, and calculated to fulfil more indications than Mr. Luke's instrument, is open to the serious objection that the cutting ring cannot pass through the tonsil, unless there is considerable space behind the gland: this space scarcely ever exists. It is true that by holding the instrument in a slanting direction it can be used when the tonsil extends far back, but the effect of operating in this way, is to leave a large piece of the tonsil projecting across the throat anteriorly.

the enlargement is principally at the lower part, and where the gland is irregularly oval, as is often the case, it is almost impossible to employ any of the different instruments that have been invented. In these cases it is also very difficult to use a knife, especially where the right tonsil has to be cut. The objections which patients themselves have to a cutting operation, often quite prevents its performance. Every practitioner must have met with cases, where the removal of the tonsils was a matter of considerable importance, and where the patients obstinately opposed an operation. With young ladies this very frequently happens. I wish it to be plainly understood, that the plan of destroying the tonsils, or rather reducing their size, which I am about to advocate, is not meant to be a substitute for the surgical operation in suitable cases, and where the patients are willing to submit to it.

For reducing the size of the tonsils, two local remedies have been specially recommended: these are nitrate of silver and iodine. Concerning the use of nitrate of silver, Dr. Graves, in his valuable *Clinical Lectures* (vol. ii., p. 198), remarks:—"Many use this in solution, but I prefer Mr. Cusack's method, which is as follows: the solid stick of lunar caustic, or some of the latter in powder, must be kept steadily pressed against a particular spot of the enlarged gland, for two, three, or five seconds; this will leave, when healed, a slight depression like the largest pit formed by a small pox pustule. When this has taken place, which is usually in about five days, a similar proceeding must take place with the other amygdala.

This process usually requires about six months." Dr. Graves remarks also, that "it is slow but sure." It is certainly the former, but most patients find it so tedious and painful, that they give it up long before the end of six months. Several surgeons have informed me, that they have been greatly disappointed with this mode of treatment. The solutions of nitrate of silver I have found quite useless for reducing the size of the tonsils, and iodine has not proved of the least avail in my hands. The ill-success, which these and other remedies yielded, had led me to coincide with Mr. Erichsen, who observes that "in the majority of instances, the disease will not be influenced by any therapeutic means that may be adopted."*

A work† by Dr. Fournié, of Paris, in which he records a number of cases successfully treated by escharotics induced me, however, to commence a new series of experiments.

* Op. cit. P. 885.

† Etude Pratique sur le Laryngoscope, et sur l'application des remèdes topiques d'uns les voies respiratoires. P. 54.

After trying various other agents, I found one that was safe, certain, and rapid (as compared with nitrate of silver) in its action. This is a mixture of caustic soda and lime. It is strictly analogous to the Vienna paste, but possesses advantages over that caustic, which will presently be stated. Dr. Fournié's cases will first be briefly referred to. He has successfully treated no less than fifty-two cases. In some, the tonsils were reduced, whilst in others the uvula was destroyed. The escharotics employed were Vienna paste and bichromate of potash. Of these, Dr. Fournié prefers the former, though he thinks the bichromate useful, especially in cases where the enlargement is of a strumous character. This caustic has also been specially recommended by Dr. Lewin, of Berlin, for destroying the tonsils. The details of several of the cases treated by Dr. Fournié are related, but most of them are merely given in outline. The cure was generally effected in about three weeks. In some instances only a fortnight was required, whilst in others it took a month. I have employed both the Vienna paste and the bichromate. They both are very efficacious, but I prefer the mixture of caustic soda and lime. To this escharotic, which I believe will prove useful in other diseases, I propose, for the sake of convenience in speaking, to apply the term "London Paste." I have used it now in more than forty cases, and I have the notes of thirty-five of these. No bad symptom has ever followed its use. There has never been any excessive inflammation, nor any gastric irritation. It has been employed on very young children, on several under three years of age. The mode of applying it, the precautions which must be taken, and other circumstances in connexion with its use, will be brought before you in my next lecture.

(To be continued.)

Essays and Reviews on Affections of the Nervous System, including their Pathology and Treatment. By WILLIAM CAMPS, M.D., Member of the Royal College of Physicians, London, &c., &c.

PRACTICE WITH SCIENCE.

No. 1.—*On Hysteria, and the Hysterical Constitution or Temperament.*

(Continued from page 393.)

IN discussing the subject of the hysterical constitution or temperament, it is incumbent upon us to ask ourselves this

question: Is this disease—hysteria—hereditary? I have no doubt whatever, from actual experience, derived from observation, as well as from reading descriptions thereof in the works of medical authors who have written upon this malady, that this question must be answered in the affirmative, and that, in some instances, hysteria is directly transmitted from mother to child; but, in regard to diseases of the nervous system in general, as affected by parental transmission, this all but universal law, may be expressed thus: that if one, or still more so, if both parents be affected with almost any disease whatever of the nervous system, the offspring, whether one or more, is, with rare exceptions, extremely liable to suffer from some one nervous disease, although the particular disease affecting the offspring may not be exactly the same disease as that affecting the parent or parents. The state of things in relation to parent or parents, and offspring, may be briefly expressed in this manner: given a parent or parents affected with almost any nervous disease, and the chances are, that the offspring of such parent or parents will, most probably, suffer from nervous diseases in one form or another.

Thus, by way of illustration, one or both parents may suffer, or may have suffered, from epilepsy; yet, it by no means follows, that the offspring of such parents will suffer from that same disease—epilepsy; although it is highly probable that they may suffer from convulsions, or from hysteria, or paralysis, or some other form of nervous disease; or, conversely, the parent or parents may suffer, or may have suffered, from paralysis, or hysteria, or convulsive disease of some kind or other, whilst the offspring of such parents shall suffer from epilepsy. In my own practice and observation, I have known instances of this description. I remember, too, distinctly, on one occasion, in conversation with Dr. Brown-Séquard, one of the physicians to the National Hospital for the Paralysed and Epileptic, in Queen's-square, to have mentioned this circumstance in connection with diseases of the nervous system, when that physician completely concurred in that opinion, as a fact he had frequently observed in nervous patients. One remarkable instance, amongst others of a similar kind, is now before me, in the person of a grandfather, whom I have known for a long time, as affected with partial paralysis, several of whose children suffered from one form or other, of nervous diseases, and his grandchildren, also, are to my knowledge sufferers from nervous affections of one kind or another. The very remarkable case of tetanic catalepsy, which was under my notice some few years ago, occurred in a female grandchild of this identical grandfather, who was

affected with partial paralysis. I may here mention, that in the series of communications upon affections of the nervous system which I design for the pages of the "Medical Mirror," it is my intention to offer one or two essays treating exclusively upon Trance or Catalepsy, in which I shall introduce in detail the particulars, with remarks thereupon, of this case of rigid, tetanic, non-plastic catalepsy, as they presented themselves to my observation some time ago, in the grandchild of this her partially paralysed grandfather on her mother's side.

In support of the foregoing statements bearing upon the peculiar, yet varying character of the hereditariness of nervous ailments, as transmitted from parent or parents to their offspring, or from direct or remote ancestors to their direct or remote progeny, I now take leave to adduce the following instance of this kind, in connection with nervous affections, although not of the hysterical class: I have, at this time, under my own observation, an interesting, intelligent young lady, of about sixteen or seventeen years of age, who is affected, although but slightly, with sleep-walking, somnambulism, whose father has been frequently under my care, in consequence of severe and protracted nervous affections, assuming a great variety of symptoms, both physical and psychical, and whose paternal grandfather and grandmother suffered long and severely during their lives from one or more nervous affections. The grandfather when in middle life had an attack of apoplexy, followed by complete hemiplegia, from which he completely recovered, yet, leaving him, throughout the remainder of a good long life, affected with brain-disease at times, almost amounting to insanity. The paternal grandmother, from the middle period of her life, suffered at times from local or partial epilepsy, attended with persistent partial hemiplegia until her death, which took place at a somewhat advanced age. The particulars of this case of somnambulism, I shall hope to lay before the readers of this journal in some subsequent number, when treating of sleep, dreaming, illusions, or delusions, with other psychical conditions bearing upon nervous affections attended with *impaired* or *perverted* sensation and intelligence. Just as we sometimes observe a constitutional or hereditary weakness in most other parts or organs of the human framework in both sexes, so in like manner, we not unfrequently observe a similar weakness in the various portions of the nervous tissue pervading the human body, whether male or female; and, moreover, we may affirm, that just in proportion as this constitutional or hereditary weakness of the nervous system is more or less strongly developed in the individual, in like proportion is the same weakness easy or difficult of eradication; and in

some exceptional cases, although it may not be absolutely ineradicable, and, consequently, incurable, still, such rare cases will of necessity demand the utmost care and attention that medical skill can afford, throughout all periods of life. In regard to females, perhaps there is no habitual practice that has done more to favour the unhealthy development of any latent constitutional or hereditary weakness of the nervous system, than the pernicious custom of tight lacing, a custom that so long prevailed in their physical training; and of all the unnatural errors connected with the physical education of young ladies, this has always been one of the most mistaken, and one of the most mischievous as to its results upon the entire nervous system of those exposed to its influence.

It has been known to produce an excessive, an undue mobility of the entire nervous system, which has chiefly manifested itself at about the age of from thirteen to sixteen years. As I am now adverting only to the nervous and hysterical constitution or temperament, I forbear any further allusion to this practice amongst females, with reference to its equally mischievous effects upon other important organs and functions of the female framework. Amongst the influences which we should naturally expect, attended with bad effects upon the hysterical constitution or temperament, are the suppression or retention of the natural secretions and excretions of the body; for, if such secretions or excretions as in health should be evacuated, are morbidly retained within the body; or, if, on the other hand, such, as in health should be retained, are evacuated from the body, we cannot be surprised, nay rather, we should expect, that among other parts of the body likely to suffer from these irregularities, and so to become diseased, the nervous system in its various parts would become affected with varied and numerous derangements. That this is so, all observed and recorded medical experience combine to substantiate

Whilst thus briefly adverting to the bad results of suppressed secretions or excretions, I forbear to enter now into any detail as to the special, the particular, effects that are well known to ensue upon the suppression or retention of special natural discharges. At another time I may hereafter enlarge upon this subject.

In confirmation of what has been here advanced, we may remark that there are few parts of the human framework that are not weak, and occasionally imperfect in some families; so much is this the case, that in a physical as well as in a moral sense, most, if not all of us, may be said to have our weak points; parts of our bodies which ordinarily are the first to

take on a morbid action, and if this be truly so, in regard to many other parts of our physical frame, it is by no means difficult to comprehend that any weakness or imperfection of the nervous system should be as hereditary as the weakness or imperfection of any other part or organ of the body.

Thus we see, as we might reasonably expect, that apoplexy, paralysis of various kinds, epilepsy, convulsions, and hysteria may be, and very frequently are, transmitted from parent or parents to their offspring.

The facility to acquire the aptitude or tendency to hysteria depends greatly upon age and upon sex. There are, however, some individuals of both sexes so fortunately constituted as to their physical framework, so strong, so robust, in whom the nervous system is so well developed as not to be affected with undue mobility, and not to be unduly affected either by external or internal impressions; and in whom the muscles are so firm and tense, as not easily to be susceptible of undue contraction, so as to be thrown into states of convulsion, and who, consequently, do not appear to be susceptible of attacks of nervous diseases, unless from the application of unusual, and it may be really accidental and uncommon exciting causes. In these rare and fortunate individuals, we are almost compelled to admit the persistent existence of that natural and beautiful harmony of part with part, which characterizes good sound health; a healthy harmony existing between the blood on the one hand, and the nervous masses on the other; such a harmony as enables each part to perform its appropriate function in the human economy, and thus enabling the individual to possess and enjoy a large amount of physical well-being. We may easily suppose some such healthy harmony of part with part to exist in the bodies of many animals, wild and domesticated, whose life as long as it lasts, is one continued period of physical enjoyment and well-being.

When we meet with this formidable, troublesome disease hysteria, in its exalted, may I say, in its exaggerated condition, and by this, I mean, where it presents itself to our notice as medical practitioners, in patients in whom not only the bodily, the physical, framework is more or less affected; but at the same time, the intellectual and moral framework, (if I may be allowed the expression) are also affected; we have, as it seems to me, a derangement of that part or, of those parts of the human framework which connect together man's physical and man's psychical nature.

Not long since, whilst engaged in friendly conversation with an intelligent medical acquaintance upon this subject, I suggested to him that such cases of diseases as these exalted,

exaggerated instances of hysteria, might with propriety be designated as cases of *somapsychopathy*, denoting their combined disorder or derangement of body and of mind.

Regarding hysteria from this point of view, we may claim for it, when intensified as in cases now under consideration a very high, possibly the highest, place in our nosological classification; a higher place in fact, in a nosological arrangement, than we can claim even for that formidable disease epilepsy, which, formidable as it doubtless is, still appears to me to be a more purely physical disorder than hysteria. In support of this opinion, I remark, that we may occasionally witness attacks of epilepsy in animals, and very frequently attacks of convulsions in them. I have myself seen epilepsy in the horse, the particulars of which I forwarded to the *Veterinarian*, a monthly journal devoted to veterinary science; and it is well known that Dr. Brown-Séquard was accustomed to produce, at will, epileptiform attacks or seizures in guinea-pigs; yet, notwithstanding these observations of convulsive affections in animals, no one I apprehend would assert that, in any animal lower in the scale of being than the human animal, he had seen attacks or paroxysms of hysteria; this disease as it appears to me, puts forward its claims for dominion only over poor suffering human nature, leaving brute nature totally exempt from its control and authority. Comparative pathology may doubtless throw considerable light upon many of the diseases that affect our common humanity; but I fear that it will not contribute *directly* very much to our stock of knowledge in regard to hysteria, although *indirectly*, in regard to convulsive diseases, it may possibly, hereafter aid in removing some portion of that error and ignorance concerning these, which unhappily, still becloud our intellect, and thus too successfully baffle, and sometimes altogether interpose between our well-intentioned efforts, and our patient's welfare and restoration to health.

In the Essays upon Epilepsy, which I hope to forward for publication in the subsequent numbers of this journal, I may possibly, and by way of comparison and illustration, introduce a detailed account of this case of epilepsy in the horse, to which I have but now and thus hastily adverted. I had hoped to add in this number of the "Medical Mirror," some remarks upon hysteria in the male subject, with reference to symptoms and treatment, but must defer doing so until some future number of the journal.

(To be continued.)

REVIEWS AND NOTICES OF BOOKS.

Transactions of the Obstetrical Society of London. Vol. v, for the year 1863, pp. 330. London: Longman and Co. 1864.

THE fifth annual volume of the Transactions of this young and flourishing society is not, in any respect, inferior to those previously issued, containing, as it does, some forty papers, which, although naturally unequal in point of merit, have the same practical object in view, namely, the advancement of obstetrical and gynæcological knowledge.

We are glad to see by the list of Fellows placed at the beginning of the volume, that a considerable number of new admissions have taken place during the past year. On glancing over the list we are somewhat surprised, however, at the absence of the names of several practitioners of high repute, in the specialities for the study of which this society was established. Let the reasons for the absence of these names be what they may, the society could not be in a more satisfactory condition; and, as the President remarks in his excellent address, "It is impossible not to congratulate the society upon its continued financial and numerical success."

The most important paper in this volume is that by Dr. Clay, of Manchester, on Ovariectomy. He points out the desirability of having the temperature of the room raised, during the operation, to about 75° Fahr., and says that the inhalation of chloroform presents a drawback in the retching and vomiting which are frequently caused by it; at the same time, the operation is of so formidable a nature that this useful anæsthetic cannot be dispensed with. Dr. Clay advocates the mode of operating by a large incision, and gives the preference to ligatures composed of Indian hemp over those made with any other material. As regards the frequent vomiting, there is no positive remedy for it, but the best method of treatment is not to supply the stomach with much food of any kind until its sensitiveness is allayed, and then in small quantities, and of the simplest character. In the progress of the cases which have come under his observation, Dr. Clay has often noticed certain critical days upon which the symptoms are of a graver nature. If the patient does not sink from the shock of the operation within twenty-four hours, there is a tendency to fatality on the third day from unsubsided inflammation; this complication is not to be treated

by bleeding, but by hot fomentations, on which Dr. Clay entirely depends. The next critical day is the sixth, when there is danger from prostration after the subsidence of peritoneal inflammations, especially in elder females; in younger subjects, the ninth day is the more usual period of prostration. The twelfth day sometimes ushers in very troublesome symptoms, consequent on loosening or throwing off of the ligatures which surround the pedicle. After this last-named period, the patient's recovery is moderately safe. The right ovary is more subject to disease (by one-third, in 1,600 cases noted by Dr. Clay) than the left, but no physiological cause can be assigned for this peculiarity. He does not approve of purgatives in the treatment after ovariectomy, but depends upon the administration of ox-gall, together with the use of enemata, composed of simple gruel with castor-oil, or, if the bowels are much confined, one or two ounces of ox-gall may be added to the gruel: the ox-gall prevents the excessive flatulence sometimes present. Dr. Clay allows neither the bladder nor the rectum to be emptied without the aid of the catheter or an enema, for the first five or six days after the operation. With respect to the age of patients, there is none at which ovariectomy appears to be more successful than at others; but the author says that if he had the choice, he should prefer to operate at that period of life at which the menstruation had ceased, or was about to cease. Dr. Clay further contributes a paper on the use of wire loops in the treatment of various malpositions of the uterus, one of which, retroversion of the uterus, forms the subject of a special paper by Mr. Hardy.

Dr. Aveling, of Sheffield, gives some interesting observations on Vaginal Lithotomy. He prefers the method of fastening the sutures by coil-wire to that in which the beads are employed, and shows that the consequences of the operation are simple, as regards the risk of injury to the vessels or to the peritoneum. Only one out of thirty-five cases of which particulars have been collected by Dr. Aveling was attended by fatal results, and, even in this, the death could not, strictly speaking, be considered as resulting from the operation.

Mr. Baker Brown furnishes a paper on the same subject, and one of considerable practical importance on Vesico-Vaginal Fistula, its cure by surgical means, and the results obtained in fifty-five cases operated upon at the London Surgical Home for Females. Out of this number, he reports forty-three as cured, one much relieved, two followed by fatal results, five not cured, and four as being at the time of his making his communication, under treatment, with every pros-

pect of a cure. These are valuable results, in the treatment of an affection which, until recently, constituted one of the opprobria of operative surgery. In summing up the subject, Mr. Brown arrives at some practical deductions, of which the chief is that vesico-vaginal fistula would scarcely or never occur, if labours were not allowed to become too protracted. The same writer gives the sequel to a case of retained menses caused by atresia vaginæ, and also a case of ovarian dropsy successfully cured by ovariectomy.

Extra-uterine gestation is treated of in three separate papers by Mr. John Marshall, Mr. Hayden, and Mr. L. R. Cooke; the last giving details concerning a singular case of uterine and extra-uterine pregnancy, progressing simultaneously in the same person to the full term of pregnancy, resulting in the death of the patient.

A case of Cæsarian section is described by Dr. Swayne. The mother, a deformed dwarf, died from the shock of the operation and subsequent peritonitis; the child is still living.

The contributions on tumours are interesting. Mr. H. L. Freeman relates a case of polypus uteri, weighing 3 lbs. 11 oz., which complicated labour, and was removed by ligature two days after delivery. Dr. Graily Hewitt describes a case of fibrous polypus, and Dr. Barnes gives the particulars of a case of fibroid tumour, situated in the anterior wall of the uterus, which rendered labour difficult. Besides this paper, Dr. Barnes contributes a short case of face presentation, and upon the subject of spina bifida occurring in conjunction with hydrocephalus, which is also treated of by Dr. Leishman. Mr. Tomlinson furnishes a case of tuberculosis of the uterus, in which that organ was considerably enlarged, and the uterus, Fallopian tubes, and ovaries were found upon post-mortem examination to be filled with tuberculous masses, enclosed in thick yellow matter; no tubercles existed in the lungs, or in any other organs, so that this case was of an exceptional character, as the deposition of tubercle in the uterus is generally of a secondary, not primary, nature.

Dr. Greenhalgh's remarks on the treatment of dysmenorrhœa and sterility, and on a new metrotome are specially worthy of notice. He also contributes a paper on a case of diseased cervix uteri removed by the *écraseur*. Dr. Braxton Hicks gives in a brief form an account of 20 cases of labour, in which combined external and internal version were resorted to; and he also writes on obstruction of labour by abnormal conditions of the foetus.

The medical history of woman in Southern India is ably dealt with by Dr. Shortt. Dr. Skinner describes eight cases

illustrative of the galactagogue properties of Faradisation; and Dr. Kidd discusses the use of anæsthetics in midwifery.

We can only enumerate the other contributions to this excellent volume. These are: On displacement of the bladder as a cause of tedious labour, by Dr. Broadbent, with details of eight cases; distension of the bladder as a cause of post-partum hæmorrhage, by Dr. Earle; on a variety of chronic pains in the back, by Dr. Gervis; amaurosis occurring eight times in succession, after parturition, by Dr. Eastlake; a case of face presentation, followed by sloughing of the mucous membrane of the bladder, &c., by Dr. Martyn; a case of ascites, complicated with ovarian disease, by Dr. Murray; syphilis, after vaccination, by Dr. Druitt; case of face monstrosity, by Mr. Sequeira; the production of abortion by the use of tents made of *laminaria digitata* (common sea tangle), by Dr. Pritchard; and a rather long paper on whooping cough, by Mr. Marley, which, although it contains no novel views, gives a good outline of the different plans of treatment which have been recommended for this troublesome affection.

An Elementary Text-book of the Microscope; including a description of the Methods of Preparing and Mounting Objects. By J. W. GRIFFITH, M.D., F.L.S., etc. Pp. 192. London: John Van Voorst. 1864.

THE author of this work has wisely kept in view the object for which it was written, instead of going out of the way, as is too commonly the case with the authors of so-called elementary treatises, for the purpose of showing off their own superior knowledge. He has already an European reputation as a contributor to microscopic science, through the splendid micrographic dictionary which was brought out some time since under the conjoint authorship of himself and Professor Henfrey, and the work before us has consequently an impress of authority.

As we have just observed, elementary treatises are frequently spoilt by the introduction of matter of too abstruse a nature for beginners, or, worse still, they contain errors which do an infinite degree of harm by leaving much for the student to unlearn at a future period of his studies. From these defects Dr. Griffith's text-book is singularly free. Starting with the assumption that the reader has had no previous acquaintance with the microscope, as used in the study of natural history, the author has described numerous objects and the manner in which their examination should be con-

ducted, simply, and, at the same time, clearly. He has also added the technical terms (all of which are accentuated, to show their pronunciation), with an explanation of them, so as to gradually render them familiar to the reader, and thus facilitate the subsequent study of larger and more detailed works.

After two preliminary chapters upon the microscope, including a description of its different parts, the way in which they should be used, and the mounting of microscopical specimens, for the purpose of preservation for future examination, the author enters upon the consideration of the microscopic structure of objects. He begins first with those which are derived from the vegetable kingdom, as they are more readily obtained and prepared for examination than specimens belonging to the animal kingdom; besides which, they possess the additional advantage of not being so transparent, and they are therefore more easily distinguished under the microscope. The same degree of solicitude for the convenience and assistance of the beginner in his studies is exhibited throughout the whole book, and in the selection of illustrative objects Dr. Griffith exhibits a predilection for such as are common and readily procured.

The reader's interest in the subject is soon aroused by the manner in which the author shows the importance of microscopic observation. Thus, at page 23, in the chapter upon vegetable elements and tissues, he points out the value of the knowledge of the peculiar forms of starch-granules in a practical point of view; and, in the short space of a few lines, aided by some of the excellent figures which adorn the book, he demonstrates how the microscopist can easily detect the adulteration of table-mustard with wheat or pea-flour, how potato-starch, employed largely in the adulteration of arrowroot, may be recognized under the microscope, and how we may ascertain the presence of rice, which is fraudulently mixed with wheat-flour, as it makes inferior flour into very white bread. The learner, stimulated by the ready acquisition of practical knowledge, is thus induced to take a lively interest in the work before him.

Chapter IV. contains an account of the principal organs of vegetables,—leaves, stems, flowers, ovaries, &c., and the following chapters are devoted to the description of objects belonging to the classes of ferns, mosses, algæ, lichens, and fungi. The algæ, including both marine and fresh-water varieties, and the fungi, are described at considerable length.

After the reader has mastered the details of the microscopical study of objects derived from the vegetable kingdom, he will be better able to follow the author in the description

of the animal elements and tissues, which are briefly and clearly set forth in a separate chapter. Subsequent chapters furnish numerous specimens for examination, selected from the sub-kingdoms, Articulata, Radiata, and Protozoa. The concluding chapter is devoted to a consideration of the nature of light, and of the optical principles which are involved in the construction and use of the microscope.

We ought not to omit to mention that the work is copiously illustrated by coloured plates, containing four hundred and fifty figures, so that it is fully adapted for self-tuition, as well as for a class-book, and we have complete satisfaction in recommending it for either purpose, as being the best work of its kind with which we are acquainted.

RECENT WORKS ON HELMINTHOLOGY.

1. *On Human Entozoa : comprising the Description of the Different Species of Worms found in the Intestines and other parts of the Human Body, and the Pathology and Treatment of the various Affections produced by their Presence ; with numerous Illustrations.* By W. ABBOTTS SMITH, M.D., M.R.C.P., Lond., Physician to the Metropolitan Free Hospital, etc. Pp. 251, 8vo. London: Lewis. 1863.
2. *On Santonine ; with Special Reference to its Use in the Treatment of the the Round and Thread Worm.* By WILLIAM ANDERSON, M.D., Resident Physician to the Birmingham General Hospital. (Pamphlet.) 1864.
3. *On Trichinosis, or Flesh-Worm Disease : its Prevention and Cure.* By JULIUS ALTHAUS, M.D., M.R.C.P., Lond., Physician to the Royal Infirmary for Diseases of the Chest. Pp. 34, 8vo. London: Churchill and Sons. 1864.

THE subject of worms and other parasites affecting the bodies of man and the lower animals, has been always one of much interest to medical practitioners, and particularly to those who are much engaged in the treatment of children. The surgeons of hospitals, dispensaries, and other public institutions for the cure of the sick, have always looked upon the parasitic as amongst the most troublesome and intractable forms of disease which fall to their lot to treat. Of late years much attention has been attracted to the introduction for their cure, of medicines either new or but little known before. Various trials have been made, with considerable mutations of opinion: their object being to test the relative

efficacy of male fern, of kousso, of kamala, and more recently of santonine, in addition to the better known anthelmintics.

Still more recently the public and professional minds have been; we may say, agitated by the very alarming accounts of the fatal effects caused by the introduction into the system of one particular parasite, the *Trichina*. The new, or at any rate very modern, disease *Trichinosis*, may number its victims by tens and twenties at a time, as has been proved by recent experience in the case of the fatal epidemic in 1863. We may, not without a rational anxiety, anticipate outbreaks of this disease to occur among ourselves, and to cause widespread destruction and alarm at any time, while we, at the present moment, have very little positive knowledge of the conditions of its production, still less of the means of prevention, and none of its appropriate treatment. Hence a scientific inquiry into the nature and action of the parasites affecting the animal, and especially the human body, has become of vital importance.

The first book on our list, Dr. Abbotts Smith's, supplies almost all the information that is at present attainable on the nature of human entozoa, their modes of development, and the treatment of the diseases induced by them. The preface informs us that the author has made free use of Dr. Davaine's well-known excellent "*Traité des Entozoaires et des Maladies Vermineuses de l'homme et des Animaux Domestiques*," published in Paris in 1860, and in handsome terms Dr. Smith acknowledges his obligations to that author. Although he has in his general arrangement followed the plan adopted by Dr. Davaine, the author has found materials derived from his own experience and that of his contemporaries and colleagues, for treating many parts of his subject in an original and highly practical manner. The work is divided into three parts. The first contains a synopsis or general classified history of the entozoa in man; the second treats of their pathology and treatment generally; and the third is devoted to their special therapeutics. Following Davaine, he defines entozoa to be parasitic animals, possessing "neither a distinct respiratory apparatus nor articulated appendages specially adapted to locomotion," and arranges them into five classes, namely, Protozoa or Infusoria, Cestoidea, Trematoda, Nematodea, and Acanthotheca. All infusorial animalcules are not capable of living within an animal structure. Those which have that faculty are here described, the orders being further divided into genera and species. The conditions of their localization are also noted; for example, the genera *vibrio*, *monas*, and *cercomonas* have all been found in choleraic dejections; the *cercomonas* also in those of typhoid fever.

Of all entozoa the cestodea are the most common, comprising two sub-classes, *Tæniæ* and *Bothriocephali*. The author's notice of the subject *Tæniæ* is minutely drawn up. He distinguishes the conditions of embryo, of larva, which includes the acephalocyst, the cystic (*echinococcus*, *cysticercus*), and the perfect condition (*proglottis*); and also gives an outline of the theories of Metamorphosis and of Digenesis, or Alternate Generation. In the *Tæniæ* the mode of propagation is by Digenesis, a process for the theory of which we are indebted to Steenstrup. It implies the succession of dissimilar generations, sexual and non-sexual, after which the primitive type is resumed.

"The larva which produces a succession of ten or twelve individuals, born one from the other by germination, and similar to each other, has not definitively ten or twelve successive phases of generation, but two only, one sexual, and the other non-sexual; the hydatids produced successively from one another do not each represent a new phase of generation, but it is the *echinococcus* which represents this new phase; just as in plants, the succession of buds only represents the same phase of generation." P. 8.

This is found to be the manner of propagation generally amongst the cestoid and trematode worms, but—

"The animal cannot pass through the stages of larval existence in the organ in which it becomes adult, and there is consequently a necessity for migration into new organs and new animals, this migration corresponding to each new phase of its evolution." P. 8.

We must refer our readers for further information to the excellent account given in the second chapter of Dr. Smith's work, of these forms of development, including the *tænia*, *hydatid*, *echinococcus*, *cysticercus*, *bothriocephalus*, and other species. In the third chapter the author gives the natural history of the Trematoda, which include the genera *monostomum* and *distomum*, &c. In the fourth chapter he describes the Nematoidea, which include the *ascaris*, *filaria*, *trichina*, &c., and the fifth chapter contains an account of the *Acanthotheca*, in which is comprised only one genus found in man, the *pentastomum*, of which there are several species. The illustrations given in this portion of the work exhibit the parasites, in most cases, in various sizes, so as to show the actual and the microscopical appearance.

In the second part of the work, the author treats of the pathology and treatment of the entozoa, and the subject becomes more immediately interesting to the physician and pathologist. In speaking of the geographical distribution of entozoa, the author assumes it to be a law that certain kinds of worms are limited to certain regions of the earth, while others are almost universally diffused, such as the *tænia*, *oxyuris*, and *lumbricus*. They are all liable to be introduced

into the system, as much by impure water as by certain kinds of animal and vegetable food. According to Dr. Davaine, this may account for the relatively greater frequency of some varieties of entozoa in the country than in large towns. It seems so probable that a certain bodily constitution is often requisite for the prevalence and persistence of worms in individuals, that the fact has been assumed as true, and the name Helminthiasis given to this constitutional predisposition.

Further on we have full descriptions of the entozoa, as regards the localities they infest, the diseases they engender, and their general pathology and treatment. Most of these affections are of a chronic character, but not all. Some may be rapidly dangerous to life, as when a worm may have found its way into the larynx or trachea even in individuals apparently in perfect health. In such a case it might be necessary to perform tracheotomy without loss of time. It sometimes happens, although rarely, that several species of worms exist in the human body at the same time. The *Tænia nana* has only been found in Egypt; the *Tænia solium* is met with all over the world, and in some countries, such as Abyssinia, it prevails almost universally among the population; the *Bothriocephalus* exists probably only in Europe; Russia, Norway, Sweden, and Switzerland, being the countries in which it is most common. The thirty chapters in this division (Part II) contain so many details that, notwithstanding their importance, we must desist from making extracts from them. We may state, however, that upwards of eighty pages are devoted to the subject of hydatids situated in various parts of the body, and we must not omit also to mention that the twenty-eighth chapter contains a concise account of the nature and pathology of the *trichina spiralis*, which, although so insignificant in appearance, is very formidable in its effects upon the system.

The third part contains the special therapeutics of the subject. The medicines used may either act, firstly, as direct poisons to the worms, or indirectly, by rendering their *habitat* offensive to them; or, secondly, as excitants of the secretions and of the peristaltic action of the intestines, by which the worms are expelled. For convenience of reference, the author has arranged them in alphabetical order, and the list includes the older vermifuges, as well as the more recent specifics. Amongst them we find the male fern, useful in the treatment of *tænia*, and still more so in that of the round-worm; kamala and kousso, both valuable in cases of *tænia*, the former of the two being perhaps preferable, as it more frequently expels the worm than the latter does; and pomegranate, at one time very highly esteemed, particularly in India. Our Indian

experience, however, is not in favour of any permanent good effects from its administration. The author speaks from extensive use in his own hospital and private practice for some years, very highly of santonine, and gives a summary of 50 cases treated by this anthelmintic.

“In twenty-eight of these cases, the prevailing entozoon was the *ascaris oxyuris*; in seventeen, the *tænia solium*; and in five, the *ascaris lumbricoides*. Of the total number of patients, nineteen were cured after undergoing treatment for a duration of from one to three weeks; fifteen were much relieved, nine presented some improvement, and in the remaining seven, no permanent good result was obtained.” P. 235.

Its doses are, for children, one to three grains, for adults, two to five grains, twice a day, to be continued as long as is found necessary, and administered in some oily vehicle. Dr. Smith's opinion is that santonine

“Is one of the most perfect anthelmintics which we at present possess, seeing that it combines the advantage of smallness of bulk, as regards the dose in which it is taken, and of absence of unpleasant taste or serious complications, with considerable certainty of action.” P. 237.

The work concludes with a very useful glossary of the principal terms previously used; and taken as a whole, it constitutes a complete manual upon the subject of which it treats.

Such is the advance of knowledge in this branch of inquiry, however, that the author will find some excellent new materials for his second edition scattered in different journals. Of these we may notice the interesting investigations of Mr. H. J. Carter, F.R.S., as detailed in the *Bombay Medical Transactions*, No. 11, New Series, respecting the mode of production of the guinea worm. It is thought that in its earlier stage of development, it is merely the common tank-worm, which entering a sudoriferous duct, meets there with a nidus suitable for its full development; just as the *cysticercus* is generally supposed to find its nidus for development into the tapeworm, in the intestinal canal.

We think that Dr. Smith might give in his hospital practice a further trial, in tapeworm, to the kamala, the efficacy of which does not appear to have been yet fully tested in Europe, for its success in Indian practice has far exceeded that of most of the anthelmintics which he describes. It is probable, however, that either from adulteration, or some carelessness in transmission during a long voyage, the kamala found in the London market may have lost some of its therapeutic qualities, and these, as he justly observes, are doubtless the chief reasons of the comparative failure of some specifics as contrasted with their action in the countries where they are obtained.

It is probable that, as our author states, those natives of India who season their food strongly with assafoetida, are never affected with guinea-worm. We know that Indian practitioners have observed that among the Hindoos who abstain from flesh, *tænia* is very rarely met with; and these are facts having an important bearing upon the etiology of this parasite.

While writing of recent individual contributions to the knowledge of this subject, we may mention that the "Annals of Military and Naval Surgery" contain, from the pen of Dr. Macnamara, some interesting particulars respecting the *filaria papillosa* and other entozoa, which are found in the eyes of man and the lower animals.

The second publication on our list is a reprint of an article recently published in the "British Medical Journal," and contains the results of the author's experience, with observations derived from other sources. His evidence tends to confirm the favourable opinion entertained by the profession regarding santonine as a vermifuge, particularly in the treatment of lumbrici and ascarides, as had been previously pointed out by Dr. Smith in the "Medical Times" and other periodicals.

Dr. Anderson alludes to the serious forms of disease which are often caused by these entozoa, and are described in Dr. Smith's systematic work; particularly those partaking of the epileptiform character. He also cites a case at the Birmingham General Hospital, in which death occurred from hæmorrhage, the result of perforation of the intestine by lumbrici. There is indeed abundant evidence to show on every side the dangers accruing from the presence of these more common kinds of worms.

Dr. Anderson's cases show that santonine is a powerful agent in expelling the lumbrici, and like the author just quoted, he has seen no permanent bad effects from its use. He adopts the plan recommended by Dr. Fleming, of Queen's College, Birmingham, of giving the drug mixed with cream or milk, but he gives it three times instead of once a day; following it up with a dose of castor oil, and regards it as a specific for lumbrici only. It is insoluble in water or weak acids, but freely soluble in the alkaline juices of the duodenum, and hence "not active as a worm-poison until brought into actual contact with its victims in the small intestine." One patient, a girl of six, pale and anæmic, passed sixteen lumbrici, after taking santonine, none having been passed after the use of male fern, which was given on the suspicion of *tænia* being present, and only two being expelled after turpentine with castor oil. Certain as a poison for lumbrici, it is decidedly inferior to the male fern and the kamala in the treatment of

tænia. He has used it in the treatment of ascarides in the form of injection, but with results not better than those obtained with an infusion of quassia, four times the usual strength, and common salt.

Dr. Anderson appends the results of some experiments he made upon rabbits, to elucidate the physiological action of santonine. These seemed to establish the facts that this drug is partly absorbed in the stomach, and that it requires a larger dose than thirty grains to poison a rabbit.

The brochure by Dr. Althaus, is a much extended reprint of an article in the "Medical Times and Gazette." The new facts concerning trichina disease elicited since that article was written, have enabled him to make numerous additions, especially from Dr. Rupprecht's account of the Hettstädt epidemic.

It is now apparent that we are liable to the invasion of a disease more fatal than typhoid fever, which although not yet observed in England in the living subject, is proved by the result of examinations of dissected bodies, to occur in this country not unfrequently. At the same time it may be prevented with certainty, if proper precautions be taken. The discovery of this disease, as arising from the immigration into the human system of a very minute worm, the *trichina spiralis*, which is found chiefly in the flesh of pigs, seems to date only from the year 1860, when the microscope revealed the fact. The history of the disease can only be referred back to the year 1832, when probably the worm may have existed in a case of cancer treated by Mr. Hilton of Guy's Hospital. In 1835 an opportunity was afforded to Mr. (now Professor) Owen of examining this worm enclosed in a cyst, and from him it received its present name. Of late years it has been frequently observed by German and British anatomists. In the anatomy rooms of the Universities of Berlin and Edinburgh, trichinae have been found in two or three per cent. of the subjects dissected. Zeuber was the first to find, in a girl who had died at Dresden, numerous trichinae in the striated muscles, and to recognize the parasite as the cause of the illness and death of the patient. Since then the disease has occurred in an epidemic form in several places; most notably in 1863, in Hettstädt, near Eisleben, in which 158 persons were affected, and 28 of them died.

Dr. Althaus gives a minute description of the parasite, which, it seems, is subject to the law of alternate generation, as in the case of cysticercus and other worms. On this point, as well as many others, we are indebted to the researches chiefly of Virchow, but also of Leukhart and Colberg. It is the more formidable, as it only needs to be eaten *once* in order

to produce a progeny which affects the whole system. The author gives several figured illustrations, both of the male and female worm. He afterwards proceeds to detail the symptoms of Trichinosis, of which he distinguishes three stages. The first comprises the time from the arrival of the worms in the intestines, until the birth of the first of the progeny, there being slight symptoms in general, but some nausea, pyrexia, &c. The second stage lasts from the time when the embryos commence their migration from the intestinal canal into the muscles, until they have taken up their permanent abode in the muscular tissue. In this, the most important stage, we may have oedema of the face, high fever leading even to delirium, pneumonia, pleurisy, &c., muscles swollen and rigid from trichinous infection, giving rise possibly to tetanus, dyspnoea, &c. In fatal cases death ensues from exhaustion of the nervous centres, generally during the third or fourth week. In others, the third stage is that of recovery, commencing towards the fifth week, from the time that the worms have become permanent and encysted.

The fever and other alarming symptoms then decline. Desquamation of the cuticle takes place. Convalescence is complete about the seventh week, but very often there persist for a time much cardiac anæmia and debility.

Children suffer little, either from their having eaten less of the poisonous meat, or from their food having been rapidly thrown off by the alimentary canal.

Among the post-mortem appearances, given by the author in detail, one of the most notable is the existence of embolic clots in the pulmonary vessels and tissue. The muscles of the eye are much affected, and consequently the power of accommodation paralysed. It is calculated that the worms move through the body, rather from the centres towards the extremities, and at a rate of one-third of an inch per hour. Oedema of the neck, in many cases, causes fatal congestion of the brain. Trichinæ do exist, but very rarely, in the pericardium and heart, but it is stated that they soon leave these parts. Possibly the uterus may be exempt from their invasion.

The cause of the disease is probably always the having partaken of raw or imperfectly cooked pig's flesh, and Dr. Althaus makes some apt remarks regarding the prohibition of this meat by the Jewish law.

To attain a perfect diagnosis the author recommends the surgeon to harpoon out a small piece of any apparently infected muscle, or, in the absence of muscular swellings, of the deltoid muscle. The examination must be made under the microscope, except in the case of calcified cysts, and will

equally avail long after the disease is cured. It was thus satisfactorily shown that the Blankenburg epidemic, in which no less than 278 soldiers, and a corresponding number of civilians, had fallen ill, had, in reality, been nothing but trichina disease. Trichina cysts have often been found in conjunction with cancerous affections, but it is not known whether these two morbid conditions are in the relation of cause and effect.

As regards treatment, the author has little to say, but he suggests the cautious trial of benzole, which is known to be a poison for trichinæ. Hitherto the treatment has been confined to the treatment of symptoms as they arise. The means of prevention are the abstaining from pork, particularly if underdone. But if pork is to be eaten the pigs should be guarded from filthy habits and filthy food. The pork, also, should be examined under the microscope before it is offered for sale. In several German towns this is already the rule. Before concluding our remarks, we must draw attention to the excellent illustrations interspersed through this highly interesting little work.

The Breath of Life: or Mal-Respiration and its Effects upon the Enjoyments and Life of Man. By GEORGE CATLIN. Second edition, 8vo. London: Trübner and Co. 1864.

"SHUT YOUR MOUTH," writes Mr. Catlin upon the cover of this remarkable little book, and this startling injunction gives a good idea both of the object of the work, and of the earnest manner in which the author endeavours to carry with him the conviction of his readers that his views on the question of respiration are right.

Mr. Catlin, although not a medical man, is well known as a writer who has exercised much original research, especially amongst the Indian tribes of North America, with whom he spent many years in the observation of their manners and customs, of which he has furnished a graphic account in his "Notes of Travels amongst the North American Indians." Consequently, what he has to say is worth hearing.

In the course of his travels, observing the healthy condition and physical perfection of the various native races of North and South America, as contrasted with the mortality, diseases, and deformities of civilized life, the author was led to inquire into the main causes of the difference. After giving much curious information relative to the social state of these wild tribes, he arrives at the point upon which the whole

book hinges, viz., the fact that the Indians scrupulously keep the mouth closed, excepting when engaged in taking food or talking. The observance of this practice is inculcated upon them from the earliest period of existence, and the Indian women carefully press together the lips of their sleeping infants whenever they have been unconsciously parted, and the mouth opened. As the child grows older, precept and example combine to promote the continuance of the practice of keeping the lips compressed, and breathing entirely through the nose, to which the author in great measure imputes the freedom of these races from disease.

Many may feel disposed to throw doubt upon the value of this view of the habit, and to consider Mr. Catlin's energetic exposition of its beneficial results as wasted; but we are certain that no one can peruse his book without being more or less struck with the force of his observations.

First, as to the manner in which it affects the physiognomy, and thus carries with it the impress of the character of an individual. If the reader were about to entrust some important business in the hands of a stranger, which man would he be most likely to choose—one who stands with vacant look upon his countenance, his mouth half opened, and lower jaw dropping downwards, or one who with his lips firmly compressed, presents an air of general intelligence in his features? The answer is too certain for us to give it. It has been truthfully observed that every man's face is a history or a prophecy, and much of the facility with which individual character can thus be read off, as it were, is due to the shape and appearance of the mouth.

Secondly, with respect to the influence of the habit of keeping the mouth closed, upon health; this is far greater than is commonly recognized. In winter, persons who breathe through the nose are much less liable to affections of the chest produced by breathing the cold air, than those who breathe chiefly through the mouth. The reason for this is evident; in the former case, the air permeating the various chambers and passages of the nose, is raised in temperature before it reaches the lungs, while in the latter, the cold air passes direct through the mouth into the lungs, its temperature being probably not sensibly altered. Again, during the prevalence of infectious diseases, there is less danger of attack when a person habitually breathes through his nose, and not through the mouth. The noxious emanations from the bodies of the sick, from their excreta, or any other source of infection, are partly, we believe, detained by the natural secretion of the nose, the nasal mucus, and in course of time got rid of with this. A common instance of the extent to which minute

particles of matter are detained by the nasal mucus, is afforded by the condition of this secretion after spending a few hours in the smoky atmosphere of a town. If anyone breathes principally through the mouth, these particles are carried into the lungs (an example of this is afforded by the carbonaceous deposition found upon post-mortem examination of the lungs of people who have resided for a long time in a large town). Or if these organic impurities floating in the atmosphere are not carried into the lungs with the air which is inhaled, they are mixed with the saliva, and carried with that secretion into the stomach. The same must be the case as regards the *fomites* in infectious diseases. Mr. Catlin refers to some observations which he has at various times made, which help to establish the correctness of the view, that persons who breathe chiefly through the mouth are more susceptible of the morbid poison in fever than others.

"I have had opportunities," he writes, "of making observations of an interesting nature, in my recent travels; and amongst these opportunities, one of the most impressive was when I was making the voyage in one of the mail steamers from Monte Video to Pernambuco, on the coast of Brazil, in the summer of 1857, during which melancholy voyage about 30 out of 80 passengers died of yellow fever, and were launched from the deck into the sea, according to the custom. Having been twice tried by that disease on former occasions, and consequently feeling little or no alarm for myself, I gave all my time and attention to the assistance of those who were afflicted. Aware of the difficulty of closing the mouth of a corpse whose mouth has been habitually open during life, and observing that nearly every body launched from the vessel had the character and expression strongly indicative of the results of that habit, I was irresistibly led to a private and secret scanning of faces at the table and on deck, and of six or seven persons for whom I had consequent apprehensions, I observed their seats were in a day or two vacated, and afterwards I recognized their faces when brought on deck for the last sad ceremony."

This extract, which is the only one which we can give, shows that the author exercised much patient research before the publication of this book, which we can strongly recommend to our readers. Mr. Catlin has brought his artistic talent to bear upon the illustration of his views, and the interesting character of the work is enhanced by a number of semi-humorous sketches of the effects of the habit of keeping the mouth open.

The Home Nurse, and Manual for the Sick-Room. By ESTHER LE HARDY. Fcap. 8vo., pp. 451. London: Churchill. 1863.

As the writer justly states in the preface, ignorance in nursing is an evil which has long been generally felt, and it is with a view to remedy this deficiency that the present

work has been written. She also expressly observes that the book is not a medical work, but that its aim is to enable the friends of the sick to carry out the physician's directions, and to take the place of paid nurses in attendance upon the patient.

The object which the writer has had in view is a good one, and, with some exceptions, she has ably worked out her task. The phraseology which she uses is at times ambiguous and "stilted," from attempts at pathos and sentiment which are out of place in such a work; but, upon the whole, its utility fully compensates for these deficiencies.

The writer freely exposes the absurdity of the mistaken faith shown by many in boasted panaceas and quack systems of treatment, and she frequently espouses the cause of the medical man against the prejudices, the whims, and other difficulties which he has to encounter, in consequence of the folly and ignorance sometimes displayed by patients, and more often still by their friends, who, arguing from a shallow knowledge, and occasionally from mere desire to be thought clever, set up their opinion as of equal weight with that of the doctor.

In the first preliminary chapters the bad habits of society, large parties in heated, close rooms, late hours, and a slavish adherence to the dictates of fashion and so-called refinement, are energetically denounced; while, on the other hand, the advantages to be derived from fresh air, plenty of out-door exercise, and good plain food and cleanliness, are clearly demonstrated. It is to be regretted, for the sake of the welfare of the community, that such excellent advice too often falls upon unwilling hearers.

Subsequent chapters bring us to the most important part of the book, viz., the description of the management of a sick-room, and various matters connected with nursing. The writer sensibly objects to thick, close carpets fastened down all over the floor of the sick-room, bed hangings, and other superfluous drapery, which, while they answer no good purpose, serve to collect and retain dust, and noxious effluvia. We cordially agree with her upon this point, as well as upon the desirability of the admission of fresh air into the room at frequent intervals, so that the patient is not obliged, as he must be when the doors and windows are perversely kept closed, to breathe over again the impure emanations from his own lungs.

Poor human nature, always weak, is too apt to become peevish, selfish, and exacting in periods of illness; and the chapter which is entitled "The Patient," might consequently be read with advantage by nine-tenths of invalids, upon whom

the writer urges the duty of kindness to attendants and others, and of hopefulness and resignation under affliction.

Visitors, who by their thoughtless, wearying, small talk, and ill-timed observations, often constitute the worst pest of a sick-room, have also a separate chapter devoted to themselves, and some useful hints are given respecting the manner in which the troublesome class referred to, who only retard the patient's recovery by wearying him with their company, may be excluded without giving actual offence. The writer suggests numerous amusements for the invalid, when sufficiently strong to enter into them, in order to prevent the time from hanging heavily on his hands.

The directions for applying leeches, blisters, plasters, and other topical remedies will be found useful by all persons who are ignorant concerning these matters, and many of the hints upon the proper mode of action in emergencies, until medical aid can be obtained, are also calculated to be of service. In the remarks upon medical treatment, much of which had better been left out, the writer is not so fortunate; we should be sorry to have no other remedy at hand for sea sickness than a small bag of dried sea salt, to be placed upon the chest, or to attempt to cure all species of worms in children by an enema, composed of a piece of bitter aloes of the size of a large hazel nut dissolved in hot milk. In places, too, the pathology is faulty, and even if the statement were correct that we are ignorant of the causes of hiccough, it would certainly not be proper to assign the relief of this disagreeable ailment, which follows the persevering deglutition of the saliva, to "the contraction of the nerves (!) of the windpipe."

We have nothing to say against the remarks upon cookery and diet for the sick, excepting that game is not so harmless to invalids as the writer would have us believe.

The concluding chapters upon religion and kindred topics are written in a kindly spirit, but the too liberal use of religious phrases in many parts of the work detracts, in some degree, from its practical character.

On the whole the work is evidently the production of a lady who has devoted considerable attention to the subject of nursing, and, as such, we should have no hesitation in recommending it whenever such a manual is requisite.

1. *Cases of Tracheotomy in Croup, with Clinical Remarks.*—
2. *Tracheotomy in Diphtheritic Croup.* By JAMES SPENCE, F.R.C.S., Surgeon and Lecturer on Clinical Surgery in the Royal Infirmary, Edinburgh. 1864.

IN these two small pamphlets, embodying the substance of papers read at different times before the Medico-Chirurgical Society of Edinburgh, Mr. Spence gives the results of his experience in the performance of tracheotomy in croup and diphtheria, and shows that, as a *dernier ressort*, after other remedial measures have failed, tracheotomy is of great value.

He states that he has now performed this operation fifty-four times, in cases of croup and diphtheritic croup in children. Out of this number of cases nineteen recoveries—rather more than one in three—were obtained; and when the facts are taken into consideration that many of the patients were already *in extremis* when the operation was performed, and that in those cases where recovery did not follow, great and immediate relief from the most urgent symptoms was procured, the author's statistics are evidently favourable to the operation.

The question has often been raised whether tracheotomy is admissible in the treatment of diphtheria. This has already been ably answered in our journal by Mr. Henry Smith, of King's College Hospital (*vide* "Medical Mirror," for February and March), and Mr. Spence's experience fully corroborates all that has been said in favour of the operation. Of eighteen cases of true diphtheritic croup in which the author operated, seven patients recovered. He arranges the fatal cases into two classes; the first includes those in which the patients died of asphyxia, from the exudation developing itself beyond the opening in the trachea, or into the minute bronchial tubes; the second and larger group consists of those in which death occurred from the sixth to the twenty-first day after the operation, from asthenia, the effect of the blood-poisoning.

The author objects to the too early resort to tracheotomy, and believes that the French perform it too soon. We can only give a modified acquiescence in this opinion, and we certainly think, at any rate, that the French do not err so much on the side of precipitancy as we do on that of procrastination. The great and positive indication for operation is, as Mr. Spence justly observes, the immediate urgency of the suffocative laryngeal symptoms; and when once these set in, no time should be lost before resorting to the operation. The less suitable cases are those, adds the author, in which the constitutional morbid conditions have existed in a marked form, with fever and a quick, weak pulse, for some period

previous to the exudative affection of the air-passages, and when the croupous dyspnoea is not very intense.

He wisely points out the necessity for careful tracheotomy, and deprecates any attempts at brilliancy or rapidity in the operation. With respect to the after-treatment, he gives reasons for the preference of ipecacuanha to antimony; on the first day he begins the diet with milk and farinaceous food, gradually improving it, and, if they are rendered necessary by the exhausted state of the patient, he gives beef-tea and wine from the commencement.

EXTRACTS FROM FOREIGN MEDICAL JOURNALS.

THE FORMATION OF CLOTS IN THE HEART AS A CAUSE OF DEATH IN DIPHTHERIA.—Three causes of death resulting from the formation of coagula in the heart, in diphtheria, are reported by Dr. Meigs. This form of the affection is of peculiar interest. The patient, after the alarming symptoms at first present have subsided, appears to be favourably progressing towards recovery, when the case suddenly, or in some instances gradually, assumes a new aspect. There is a sudden arrest in the progress towards health; the patient becomes weak and fretful, the lassitude and weakness become more strongly marked, and the patient dies in a few days, or suddenly, without any warning of impending dissolution. The three patients in whom Dr. Meigs observed this sequel of the disease, were all girls, between six and eight years of age, and the fatal complication presented itself in each case, about the end of the third week from the commencement of the attack of diphtheria. In none did he observe any of the symptoms which might have been expected in death from embarrassed circulation. The circulation failed gradually, and each day there was a slight falling off in the power of the heart. The surface of the body grew paler, and somewhat ashy, but not cyanotic, and it had a shrunken look. The face looked thin and anxious. There was no lividity, no frightened or staring eye, no pleading look, as in cardiac asthma or orthopnoea, but simply an air of intense weariness and fatigue. In the absence of more specific and positive symptoms, Dr. Meigs attaches considerable importance to these peculiarities of the physiognomical expression. There was nothing particularly to be noticed about the heart-sounds, and the absence of distinct murmurs or friction, of increase in the area of dullness, or of altered position of the impulse at the apex, together with the entire absence of fever or pain, showed that there was no acute inflammatory condition to explain the altered circulation. The urine was albuminous. In the first case, upon making an autopsy, large clots were found in the right auricle, and the right ventricle, and a smaller coagulum was found in the left ventricle; in the second case, coagula were discovered in the cavities on both sides of the heart; and in the third, a large clot nearly filled up the right auricle, passing into the right ventricle, and small coagula were present in the left auricle and ventricle. In some cases, the clots extended into the large vessels. The explanation which Dr. Meigs suggests of this coagulation of the blood, is that some peculiar change takes place in the constitution of the fluids or tissues, more or less akin to that which gives rise to the exudation of the diphtheritic deposit on the mucous surfaces, which, in certain instances, by an analogous action, induces the formation of coagula

upon the interior structures of the cardiac cavities. With regard to treatment, as we are at present ignorant of the particular variety of the disease in which we should anticipate this complication, we have no better rule of treatment, than to get rid of the diphtheria as rapidly and thoroughly as possible, and not to allow ourselves to be thrown off our guard by an apparent approach to recovery. Whether a patient ever recovers after a coagulum has formed in the heart, is doubtful, but Dr. Meigs inclines to the opinion, that in some rare instances, and under favourable circumstances, nature may be able to rescue the patient, even from such grave danger.—*American Quarterly Journal of Medical Sciences*, April, 1864.

EPILEPTIC PAROXYSMS, PRECEDED BY A SENSE OF FETID SMELL.—Nothing is more variable than the manner in which the attacks of epilepsy manifest themselves. Suddenly seized, some patients fall down as if they were struck by lightning, without any subsequent recollection of the period of invasion. Others, constituting a far greater number, experience for some minutes, or for some seconds, most diversified symptoms. In my work, at the article *Prodromata*, page 49, I have mentioned amongst other cases, some examples of perversion of the senses of smell and of taste. One patient complained of a disagreeable taste; several perceived powerful, nauseating, suffocating odours. A case of this kind has recently been communicated to me by a colleague. His patient, sixty-three years of age, has been subject since 1856, to epileptiform attacks, without any premonitory scream or frothing at the mouth. When he is attacked in the night, which is now very frequently the case, the morbid sensation is naturally unnoticed; but, if he happens to be awake, the fit is constantly preceded by an excessively offensive odour, which is soon followed by trembling of the limbs on the right side of the body, and next by total loss of sensibility. After the shaking has gone off, the sensibility rapidly returns, and there is no memory of what has passed. There is a singular peculiarity in this case, which is not however, without a parallel; the sense of smell had been lost for twenty years before the commencement of the convulsive attacks. One of my patients at the Bicêtre Hospital, although he had been very deaf, was severely troubled by hallucinations of hearing. Another patient, although blind, recovered temporarily the power of sight.—*M. Delasiauve*, in the *Journal de Médecine Mentale*, May, 1864.

ANEURISM OF THE SCIATIC ARTERY TREATED BY INJECTION WITH PERCHLORIDE OF IRON.—On March 18th, M. Nélaton treated, by means of injection of perchloride of iron, an aneurism of the terminal part of the sciatic artery, which was of the size of a thumb and projected at the nates. The case was an interesting one, inasmuch as the patient had already had sciatic aneurism in the same region, for which M. Sappey had in 1850 tied the sciatic artery above the tumour—the operation being for a time successful. After one injection of the perchloride of iron, the pulsation completely ceased; the tumour subsequently gradually diminished; there was no inflammation; and at the end of a month, the patient was making favourable progress towards recovery.—*Gaz. des Hôpitaux*, April, 1864.

TREATMENT OF HOSPITAL GANGRENE.—Dr. Hamilton, Assistant-Surgeon, United States Army, gives a summary of thirty-three cases of hospital gangrene, which occurred in the McDougal General Hospital. Only two cases terminated fatally, and these some days after the gangrene had been arrested. In one of the fatal cases, death apparently occurred from exhaustion, the result of extensive suppuration of the knee joint, as the wound had been in a healthy condition for several days. In the other, the patient died from dysentery, his wound having put on a healthy action two weeks before the dysentery made its appearance. In one case, where nitric acid was used, the disease was not arrested, and at the end of ten days, it was found necessary to amputate the leg above the knee; the stump healed by first intention. An analysis of the table of cases shows that the average

duration of the cases, under all the kinds of treatment adopted, amounted to rather more than twelve days.

Number treated with nitric acid	....	....	18
Average duration of disease	....	....	16 days
Number treated with solution of bromine	....	....	14
Average duration of disease	....	....	6½ days
Number treated with iodine	....	....	1
Average duration of disease	....	....	7 days

The results are decidedly in favour of bromine.—*Amer. Journ. of Medical Sciences*, April, 1864.

THE MONTH.

THE ARMY MEDICAL SERVICE.

FOLLY and obstinacy are frequently twin qualities, and our readers will therefore not be surprised at learning that the authorities have not yet made any attempts to reform the present inefficient state of the Army Medical Department, or to redress the grievances of the gentlemen who, misled by promises which have not been kept, have entered into the medical service of the army. The deputations which have waited upon the various authorities for the purpose of representing the extreme dissatisfaction which now prevails throughout the profession at the condition of medical affairs in the army, have failed to elicit anything beyond a series of replies which, when divested of official mystery, may be summarised as follows:—"We will not give in to the wishes of the profession if we can possibly avoid it, and so long as we have a chance left of procuring men to fill the army medical appointments, no matter how incompetent they may be for such posts, we will oppose any measures involving a reform of the existing state of things." Disheartening as the results of these interviews appear to be, the cause of reform must be benefited indirectly, as we can now see the necessity, which begins also to dawn upon the public mind, of insisting upon the carrying out of those articles of the Royal Warrant of 1858, which the authorities have chosen to ignore. The public, as we have just observed, are becoming alive to the importance of the subject, and we expect that before long every journal of influence will have thrown its weight into the scale in favour of army medical reform. Sir Charles Wood's Bill for the purpose of regulating the Indian Medical Service has been defeated in the House of Commons; the vigorous opposition which it elicited being of itself the best proof of the inefficiency and injustice of the scheme which was pro-

posed. In a leading article in the *Times* of July 26th, upon Sir Charles Wood's Bill, we find the following passages, which, although long, we have great pleasure in transcribing.

"It remains to express a hope that the time is not distant when the whole Medical Service of the Army will be treated in a way more becoming its importance and its merits. It was repeatedly acknowledged last night that the General Army itself is inadequately supplied with a medical staff, and that it is so because the authorities refuse to satisfy the just expectations of the medical profession. It seems to us highly ungenerous and unjust in the military authorities to refuse to treat liberally men to whom they owe so much, and on whose skill and sense of duty their lives may at any moment depend. It is ridiculous to perpetuate the old cant about non-combatant officers. The quality of courage which is required to tie up an artery under fire, is certainly not less than that which is sufficient for leading a charge. Many men would perform a hazardous duty in the heat of a struggle, and, inspired by the presence and enthusiasm of others, who would be unequal to the cool discharge of a delicate office under imminent personal danger."

The Competitive Examination for Assistant Surgeons in the Army will commence on the 8th instant, and we shall then see what will be the effect of the extraordinary expedient which has been recently resorted to of taking men for temporary service, without any previous examination into their eligibility. Seeing that the Army Medical Service failed to attract candidates before this singular step was adopted, it is not difficult to predict that few will be found willing to present themselves for examination, knowing the class of men to whom the "back-door" system has afforded an opportunity of entering the army.

THE LICENCE OF THE ROYAL COLLEGE OF PHYSICIANS.

A SUGGESTION has lately gone the round of some of the medical journals, to the effect that the College of Physicians might, with propriety, advantageously grant their licence "ad eundem," upon payment of a small fee, to all who at present hold the licence of the Apothecaries' Hall, or, according to the more modest proposal of others, the conjoint diplomas of the Hall and the College of Surgeons. We believe that the College does not seriously entertain this step, but we deem it right to put in our protest against it, as we consider that it would not only be unjust to those who have obtained the licence after due examination, but also that it would be highly injurious to the College and to the profession. The year of grace, as it was called, in 1859-60, has been quoted in support of the proposition, but it is, at least, doubtful whether the plan which was then adopted of admitting a large number of members at a low fee, and without any examination, was not of an injurious nature. The

numerical strength of the College was certainly increased, and a corresponding augmentation of funds followed, but the members who obtained the diploma by examination, and on payment of a large fee, have suffered in consequence. Out of a total number of about 550 members now in the list, more than 300 were admitted during the year 1859-60, upon payment, in many cases, of a fee of only £10. The other members have had to pass a stringent examination, and to pay a fee of £56 under the old regulations, and of thirty guineas under the more recent ones. The injustice to the more recent members by examination can scarcely be overestimated, for it is apparent that, if the present system of electing Fellows of the College be adhered to, their chance of reaching to this grade for many years will be small, unless they happen to have influential friends upon the Council, as the names of some 350 "ad eundem" members precede their own in the College list. Of the ten members proposed for the fellowship at the recent election only two had obtained the membership by examination, so that we have not given an overdrawn sketch of the manner in which the present system weighs upon those who are entitled to write "by examination" after their names. Instances are not wanting, too, of gentlemen who have held the membership for fifteen or more years, and who still remain members, while many of the newly-created members, of the year of grace, found themselves made fellows, almost before the ink with which their diplomas of membership were signed had become dry. It is too late to remedy the mischief thus unwittingly done, but the Council might, as has been frequently suggested, make some little distinction in the College list between those members who have been admitted after examination, and those who joined the College during the year of grace.

Those gentlemen who have originated the agitation respecting the proposed "ad eundem" licence of the College of Physicians, for which, by the way, they desire to pay only a small fee, thus holding at a cheap value that which they profess themselves so anxious to obtain, appear to forget that the College has already instituted a modified examination in medicine, surgery, and midwifery only, for practitioners whose qualifications were obtained prior to 1861. This fact does away with all their arguments that, through having been actively engaged in practice for several years, they have not had time to keep up their knowledge of anatomy, *materia medica*, and other elementary (as some choose to call them) studies, for it is expressly intended that they should only be examined in matters which must constantly come under their notice in the daily exercise of their profession. Surely this

means of obtaining the licence ought to satisfy every reasonable individual.

As we have already said, there are good grounds for the expression of a belief that the College will not undertake an indiscriminate admission of licentiates, and we think that nothing could be more unwise than for them to do so. We had a year of grace in 1859. With another in 1864, the system of quinquennial "ad eundem" admission to the College would be inaugurated, and perhaps so firmly based that, after a time it might become worthy of the consideration of the College whether it would not be desirable to discontinue the expenses connected with the examinations, and to rely entirely upon the election of candidates to the different grades at stated intervals. Then would the lowering of the College be completed.

DISHONEST ASSURANCE COMPANIES.

SOME of our correspondents have requested us to direct attention to the dishonest attempts of certain Assurance Companies to obtain medical advice upon the health of intending assurers, without any intention of paying for such important information, and we have been desired to suggest some practical remedy. We use the term dishonest advisedly, for we are convinced that the tricks which are played by some of these companies, evidently relying upon their collective strength, are such as any individual person would shrink from doing, lest he should bring himself within the reach of the law. The different ways in which the fraud is effected are as varied as they are ingenious. Sometimes a medical man receives a note requesting him to reply to a series of questions relative to Mr. —, who, it is understood, is a friend of his. Looking upon this as a professional engagement by the Company, the practitioner proceeds, in good faith, to fill up numerous particulars, none of which could have been answered properly excepting by a medical man, and returns the report to the office. Subsequently, learning that his patient has effected a policy of assurance upon his life, the doctor having waited in the expectation of hearing again from the Company, who have probably not even taken the trouble to acknowledge the receipt of his letter, writes to remind the secretary of the services which have been rendered by him, and for which no remuneration has reached him. A second letter, couched in stronger terms than the first, and occasionally even a third, is necessary before any reply can be extracted; and, at last, a curt epistle to the following effect is received:—"Sir,—In reference to your letter of such a date,

I am instructed to inform you, that your opinion was asked simply as a friend of Mr. —, and not as his medical adviser. I am, Sir, yours obediently, —." On another occasion, a large, official-looking envelope, of truly imposing appearance, is forwarded, containing a politely-worded, printed letter, with the name of the intending assurer inserted in the blank spaces, and a form headed, "Medical Referee's Report," containing, of course, numerous questions upon points bearing on the state of the health and probable duration of the life of the person who has made the proposal of assurance. Here, at any rate, the practitioner thinks that he is safe from deception, and he accordingly fills up, and duly transmits the report, but only to be again duped; for upon making application for his fee, he is referred to the printed letter, in which he finds it stated that he is "requested to report upon the state of Mr. —'s health for his (Mr. —'s) benefit." These are two of the ways in which medical men are defrauded by wealthy assurance companies; others, our readers' own experience will probably suggest to them. We do not suppose that any comments would have much weight with the offices which adopt such disgraceful modes of transacting business, but, as the remedy evidently rests in the hands of the profession, we would advise every medical gentleman who receives a request for his professional opinion for the use of a life assurance company with which he is previously unacquainted, and which gives no decided pledge of payment for professional advice in its prospectus, to ascertain, before complying with the request, whether he will be fairly treated or not. By the adoption of this precaution, he will save himself from much annoyance, and the offices which pay fairly for professional services will reap the reward of straightforward conduct, while the dishonest few which resort to such underhand tricks as those to which we have alluded must either conform to the rules of honesty, or be punished by the gradual and certain loss of their business.

MEDICAL INTELLIGENCE.

ROYAL COLLEGE OF SURGEONS.—The annual meeting of the Council for the election of officers took place on July 14, when Mr. Joseph Hodgson, F.R.S., of Westbourne-terrace, was elected President of the College in the vacancy occasioned by the retirement of Mr. F. C. Skey, F.R.S., of St. Bartholomew's Hospital; and Messrs. Thomas Wormald, of the same Hospital, and Francis Kiernan, F.R.S., were elected Vice-Presidents for the ensuing year.

At the election of Councillors on July 7th, the votes polled were as follows: Mr. Clark, 147; Mr. Hancock, 139; Mr. Curling, 136; Mr. Gulliver, 106; Mr. Turner, 96; Mr. McWhinnie, 63. The total number of votes was 286. A meeting of Fellows of the College favourable to an alteration in the mode of conducting the election of members of the Council, was held on July 7th, at the Freemasons' Tavern; Mr. George Southam, of Manchester, in the chair. Resolutions were unanimously agreed to, condemning the present system, and a committee composed of the following gentlemen—Mr. Southam (Manchester), Dr. Hatton (Belvedere), Mr. Mellor (Manchester), Mr. Wraith (Over Darwen), Dr. Bates (Manchester), Mr. J. Z. Laurence (London), Mr. Daglish (Wigan), Mr. Lund (Manchester), Mr. Martin (Hammer-smith), and Dr. Morris (Spalding), was appointed to assist in carrying out the same in any way which they might deem most desirable. It was stated at the meeting that there are upwards of twelve hundred Fellows of the College, of whom seven hundred resided in the provinces.

RECOGNITION OF THE SERVICES OF MEDICAL MEN IN THE NEW ZEALAND WAR.—The *Gazette* of Friday, July 15, publishes despatches received by the Secretary of State for War from Lieutenant-General Sir D. A. Cameron, K.C.B., commanding the troops in New Zealand. He mentions with special commendation the names of Deputy-Inspector General Mowat, Surgeon M'Kinnon, 57th Regiment, and Assistant-Surgeon Manley, of the Royal Artillery.

THE LUNACY BILL.—The new Act respecting Insane Prisoners, passed in consequence of Townley's case, has just been printed. In future, on the Home Secretary having reason to believe that a prisoner under sentence of death is insane, he may desire medical aid to inquire into the same, and on being satisfied as to his insanity, may order his removal to an asylum. If he afterwards become sane, he may be removed to undergo his sentence.

THE CHLORODYNE CONTROVERSY has at last been decided in the Vice-Chancellor's court before Sir W. P. Wood. His Honour refused to grant an injunction against Mr. Freeman for advertising himself as the original inventor, as the case did not come within those in which this court had interfered.

SOCIAL SCIENCE ASSOCIATION.—This Association will hold its eighth annual meeting in the city of York from September 22 to 29, under the presidency of Lord Brougham. His Grace the Archbishop of York is one of the Vice-Presidents, and also the President of the Education Department. The Right Honourable Sir James Wilde, Judge of the Probate Court, presides over the Department of Jurisprudence. The other

chairs have not yet been filled up. The Council of the Association have found it necessary, owing to the annual pressure of business, to adopt new regulations. In each of the Departments, now reduced to four, three special questions are put, and a day is to be devoted to the discussion of each, the voluntary papers being read and discussed on the remaining days. The following are the questions in the Health Department:—1. What are the best means for disposing of the sewage of towns? 2. What are the causes, and what are the means for the prevention of excessive infant mortality? 3. What is the influence on health of the overcrowding of dwelling-houses and workshops; and by what means could such overcrowding be prevented?

THE SANITARY CONDITION OF EASTBOURNE.—It will be recollected that this favourite watering place was last year visited by a severe epidemic of scarlet fever, and that in consequence much temporary injury resulted to the inhabitants owing to the absence of visitors, through fear of the disease. The local Board of Health, determined to raise the town above even its former excellent rank as a place of resort for invalids and others, has made great efforts during the winter. A committee of medical men was appointed to examine into the condition of the houses in which illness from the epidemic had occurred, and each of these was newly papered, painted, and whitewashed. A very complete system of sewerage is being constructed, at a considerable expense, and when it is finished, all the sewers will empty themselves into Pevensey Bay, at a distance from the town. On the recommendation of Dr. Hayman, a resident medical man whose name is known in connection with an interesting work upon Eastbourne as a resort for invalids, the present sewers are flushed weekly by many thousand gallons of water. As a result of these excellent sanitary measures, Eastbourne is freer from illness than it has ever been before.

HASLAR AND NETLEY HOSPITALS.—The annual cost of the administration of Haslar, including salaries, wages, taxes, and contingencies, amounts to £14,000. There is accommodation for 1,000 patients. The annual cost of the establishment at Netley, which could contain a still larger number, amounts to about £12,000 a-year.

ARCHBISHOPS' MEDICAL DEGREES.—A Parliamentary return shows that since 1840, Medical degrees have been granted by the Archbishop of Canterbury to the following persons:—In 1840, to Robert Hull; in 1841, to Sir William Hyde Pearson; in 1849, to Joseph Laurie; in 1850, to William Bayes; in 1851, to Edmund Charles Johnson, Frederick Gilder Julius, and John Green Bishop; in 1854, to George Canney; in

1855, to John Hodgson Ramsbotham and Ralph Barnes Grindrod; in 1858, to Edwin Cronin and William Baker; in 1861, to Edward Westall and John Rayner; and in 1862 to William Sherwin. In the twenty-three years, 1840-62, the Archbishop conferred Medical degrees upon fifteen persons. We presume that there has been nothing to prevent the Archbishop from conferring the degree of M.D. on fifteen hundred instead of fifteen persons during this period, excepting the fact that most medical men are too sensible to seek for such a questionable honour. The sooner this relic of mediæval absurdity is swept away, the better.

MORTALITY OF STOKE-UPON-TRENT.—Dr. Arlidge, Senior Physician to the North Staffordshire Infirmary, has just published details of the mortality of Stoke-upon-Trent, chiefly with reference to children and potters. He says that “the mean age of the adult population is forty-six years and a half, while that of adult males in England equals fifty-six. Consumption and diseases of the lungs were the cause of death in 13·50 per 1,000 male potters living, or 1,350 in 100,000. Above 40 per cent. of the whole number of deaths from diseases of the respiratory organs amongst adult males of all occupations happen among male potters. Nearly 60 per cent. of males thus occupied die from diseases of the respiratory organs.

PARLIAMENTARY GRANTS.—In Committee of Supply, the following sums were voted as usual by the House of Commons to medical charities in Ireland;—£2,272 for Public Infirmaries, Ireland; £2,600 for Westmorland Lock Hospital; £700 for Rotunda Lying-in Hospital; £200 for Coombe Lying-in Hospital; £7,600 for House of Industry Hospitals; £2,500 for Cork-street Fever Hospital; £600 for Meath Hospital; £100 for St. Mark’s Ophthalmic Hospital; £1,300 for Dr. Steeven’s Hospital; and £245 for Board of Superintendence and Dublin Hospital: making a total of £18,117.

SMALL-POX IN SHEEP.—Mr. Marson, of the Small-pox Hospital, and Professor Simonds, of the Royal Veterinary College, have presented their report of experiments, made under direction of the Lords of the Council, as to the influence of vaccination of sheep in preventing sheep-pox. They state that sheep-pox is not known to have existed in England but on three occasions—in 1710-11, 1847-50, and 1860, and that it is always the result of infection. They find that vaccination cannot be relied upon as a preventive or mitigant, as the vaccine disease in these animals is but very imperfectly developed even in the most successful cases. But they consider that inoculation is a measure which, if rightly carried out, offers considerable advantages. It gives security against

a natural attack, for, as a rule, sheep-pox occurs but once. It limits the period of the existence of the disease in the flock, mitigates the severity of the malady, saves the lives of many sheep which would otherwise be sacrificed, and produces comparatively but little loss of condition. It controls the extension of the disease, as one confluent natural case does more to diffuse the poison than probably fifty ordinary inoculated cases would do. Lastly, the mortality of the inoculated disease, when compared with the natural, is on the average only as 3 per cent. in the one case is to 50 per cent. in the other.

ROYAL COLLEGE OF PHYSICIANS.—The following gentlemen have lately been elected officers of the Royal College of Physicians. *Censors*: P. Black, M.D.; C. West, M.D.; C. H. Jones, M.B.; W. R. Basham, M.D. *Treasurer*: J. Alderson, M.D. *Registrar*: H. A. Pitman, M.D. *Examiners*: *a—on the Subjects of General Education*: F. Hawkins, M.D.; J. Spurgin, M.D.; H. Thomson, M.D. *b—on the Subjects of Professional Education. Anatomy and Physiology*: W. O. Markham, M.D.; W. S. Kirkes, M.D. *Materia Medica, Chemistry, etc.*: G. O. Rees, M.D.; W. Odling, M.B. *Principles and Practice of Medicine*: T. A. Barker, M.D.; J. R. Bennet, M.D. *Principles and Practice of Surgery*: F. Le Gros Clark, Esq.; C. G. De Morgan, Esq. *Midwifery and the diseases peculiar to Women*: A. Farre, M.D.; R. Barnes, M.D. *Librarian*: W. Munk, M.D. *Curators of the Museum*: J. Alderson, M.D.; G. H. Roe, M.D.; W. Wegg, M.D.; F. Sibson, M.D.

THE COLLEGE OF PHYSICIANS AND THE "AD EUNDEM DEGREE."—We have authority for stating that the Council to whom the several memorials on this question were referred, will advise the College not to grant the *ad eundem* degree of Licentiate.

COLLEGIATE EXAMINATIONS.—At the last primary examination at the College of Surgeons, no less than twenty candidates out of thirty-eight examined the first day were rejected, and on the following day seven out of twenty-four, making a total of twenty-seven out of sixty-two.

CRIMEAN MEDICAL OFFICERS.—A monument is about to be raised, near the Royal Victoria Hospital at Netley, to the memory of the medical officers—seventy in number—who lost their lives on service during the Crimean campaign. It will be of Gothic design, fifty feet in height, and will occupy a commanding position on the banks of the Southampton water. The Prince of Wales has signified his intention to lay the foundation-stone of the monument on the 1st of August.

PASS-LISTS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a general meeting of the Fellows, held on July 20th, the following gentlemen, previously Members of the College, were admitted Fellows of the same :—Harley, George, M.D., Harley-street ; Pollock, James Edward, M.D., Upper Brook-street ; Priestley, Wm. Overend, M.D., Hertford-street, Mayfair ; Wood, William, M.D., Upper Harley-street. At the same meeting, the following gentlemen were admitted Licentiates of the College :—Da Silva, Leo Charles, Burntwood, Wandsworth ; Jones, John Lewis, Carnarvon ; Jones, John Wickcliffe, Assist.-Surg. R.N. ; Skinner, William, Sheffield ; Smith, Thomas Haywood, Alcester. The following gentlemen were reported by the Examiners to have passed the first part of the professional examination for the Licence :—Bateman, Francis, St. Bartholomew's Hospital ; Bushell, Stephen W., Guy's Hospital ; Clothier, Henry, University College ; Cole, Thomas, St. Bartholomew's Hospital ; Cribb, Henry, Bishops Stortford ; Denne, Henry, Guy's Hospital ; Eccles, William S., St. Bartholomew's Hospital ; Ferris, John S., King's College ; Gill, John, Guy's Hospital ; Malin, George W., Sydenham College, Birmingham ; Robinson, Robert, St. Bartholomew's Hospital ; Rogers, George A., Commercial-place, Commercial-road ; Rundle, Henry, St. Bartholomew's Hospital ; Simpson, Reginald P., Gower-street ; Sims, Francis M. B., Sackville-street ; Skinner, William, Ampton-place, Gray's-inn-road ; Stuart, William, A. P., University College ; Stuckey, John, University College ; Taylor, Theodore T., St. Mary's Hospital ; Welch, John B., King's College ; White, James A., Salford ; Willoughby, Edward F., University College.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Court of Examiners on July 19th, and when eligible will be admitted to the pass-examination :—Creaser, W. A., Hull ; Dawson, W. B., London Hospital ; Dunn, G. N., Dublin ; Gibbes, J. M., St. George's Hospital ; Jeffreys, Richard, Sheffield ; Kelly, James, Dublin ; Laffan, Thomas, Dublin ; Lloyd, R. R. S. C. C., Guy's Hospital ; Lowndes, F. W., Edinburgh ; Martin, W. G., Manchester ; Mountain, W. J., Leeds ; Newsam, Alderson, Guy's Hospital ; Pywell, W. H., Guy's Hospital ; Quinn, J. H., Dublin ; Rowlands, J. D., Guy's Hospital ; Swann, W. B., Leeds ; Turner, T. A., Charing-cross Hospital ; Wickham, James, Middlesex Hospital. The following gentlemen also passed their primary examinations on 20th July :—Bain, J. W. D., Westminster Hospital ; Clarke, Myrry, Edinburgh ; Constantinides, Petros, Canada West ; Coxwell, J. E., University College ; Derbyshire, Francis, Manchester ; Fifield, J. S. V., King's College ; Fraser, J. M., Canada West ; Greenaway, Eustace, London Hospital ; Haward, F. R., St. Bartholomew's Hospital ; M'Millan, S. S., University College ; Marsh, W. J., Guy's Hospital ; Orme, Campbell, St. Bartholomew's Hospital ; Redwood, T. H., St. Bartholomew's Hospital ; Roberts, William, Manchester ; Smith, S. H., King's College ; Wall, R. B., St. Mary's Hospital ; Whitwell, J. M., University College.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practice on June 30th:—Fry, Augustin Barber, Sleaford, Lincolnshire; Grewcock, George, Folkingham, Lincolnshire; Marshall, Francis John, Moulton, Northamptonshire; Root, Samuel, Chesterfield. The following gentlemen, also on the same day, passed their first examination:—King, John, King's College; Manby, Frederic Edward, Guy's Hospital; Oakley, John, King's College; Stevens, George Jesse Barnabas, Guy's Hospital. The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise on 7th July:—Hall, Albert Egerton, Nantwich, Cheshire; Snaith, Francis, St. Thomas's Hospital; Stott, Thomas Sibley, St. Bartholomew's Hospital; Thompson, John, University College. As an Assistant:—Crocker, James, Dorchester. The following gentlemen, also on the same day, passed their first examination:—Husband, Henry Aubrey, St. Bartholomew's Hospital; Manisty, Francis Stewart, King's College; Martin, Anthony Herbert, University College; Robinson, Robert, St. Bartholomew's Hospital; Simpson, John Henry, St. Bartholomew's Hospital. The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on 14th July:—Foster, John Frederick, Old Court, Guernsey; Freeman, Henry William, Bideford, Devon; Hope, Henry, St. Bartholomew's Hospital; Reade, Albert Comberbach, St. Bartholomew's Hospital; Sinclair, Duncan Francis, Halstead, Essex. As an Assistant:—Marsh, Walter Alfred, New Kent-road. The following gentlemen, also on the same day, passed their first examination:—Eaton, John Chamberlin, St. Bartholomew's Hospital; Hickman, Richard Murhall, King's College; Major, Napoleon B., St. Mary's Hospital; Müller, August, St. Mary's Hospital; Sims, Francis M. B., St. George's Hospital; Swindale, John, Middlesex Hospital. The following gentlemen were admitted to the Licence on July 21st:—Knipe, W. Melville, Guy's Hospital; Jackson, Richard, Birmingham; Lacey, William Cubitt, Bermondsey; Mason, Philip Brookes, Burton-on-Trent; Rutledge, W. F., London Hospital; Roderick, W. H., Lower Haliford, Middlesex; Yates, William, Richmond Green. On the same day, the following passed the first examination:—Murphy, T. C., University College; Land, W. J., St. Mary's Hospital; Denziloe, W. Le Gros, St. Mary's Hospital; Jones, W. G., Middlesex Hospital; Worthington, J. C., Middlesex Hospital.

MEDICAL VACANCIES.

NORTH LONDON CONSUMPTION HOSPITAL.—For a Physician. Candidates must be Members of the Royal College of Physicians. Also for two Assistant-Physicians, who must be Members of the College of Physicians, or undertake to become so within a year. Testimonials to be forwarded, under cover to the Secretary, on or before August 5th. Election on August 19th.

SWANSEA INFIRMARY.—For a Surgeon for the Out-Patients. Also for a House-Surgeon. Salary, £100 per annum, with lodgings, attendance, &c. Testimonials to be sent in not later than August 4th. Election on August 8th.

LOUGHBOROUGH DISPENSARY.—For an Honorary-Surgeon. Applications to be sent on August 1st.

JEWS' HOSPITAL LOWER NORWOOD.—For a Medical Officer, to reside within two miles of the Institution. Applications to be sent to the Secretary, at 43, Hunter-street, Brunswick-square, W.C.

SHEFFIELD GENERAL INFIRMARY.—For an Assistant House-Surgeon. Salary, £65, with board, lodging, and washing. Testimonials, &c, to be sent before August 13th.

METROPOLITAN CONVALESCENT INSTITUTION.—For a Physician, in the place of Dr. Bell, deceased.

APPOINTMENTS.

- ALBERT, G. P., Esq.—Medical Officer for District No. 4 of the Croydon Union, Surrey.
- BARNES, E. C., Esq.—House-Surgeon to the Royal Pimlico Dispensary.
- BELL, J. B., Esq.—Assistant Dental-Surgeon to the Middlesex Hospital.
- BLICK, T. E., Esq.—House-Surgeon to the Liverpool Workhouse Infirmary.
- CHALMERS, J. E., Esq.—Medical Officer of the Halifax Union.
- COLDEN, E., Esq.—House-Surgeon to the Queen Adelaide's Dispensary, Bethnal Green.
- COLEMAN, W. St. John, Esq.—Medical Officer for the Miltown District of the Ennistymon Union.
- COLES, W. F., M.D.—Medical Officer for District No. 3 of the Croydon Union.
- COOK, J. J., Esq.—Assistant Medical Officer at the Liverpool Workhouse.
- COTTON, T., M.D.—Medical Officer for Upper Holloway District of the Islington Union.
- CRABB, A., M.D.—Medical Officer for the Longfleet District of the Poole Union.
- CRUISE, F. R., M.D.—Lecturer on Medicine at the Carmichael School of Anatomy, &c., Dublin.
- CUNNINGHAM, C. L., Esq.—Medical Officer for District No. 2 of the Eastbourne Union, Sussex.
- DAVIES, A., Esq.—Surgeon to the Swansea Infirmary.
- DUKE, A., M.D.—Medical Officer for District No. 1 of the Croydon Union.
- ELLIS, H. D., Esq.—Medical Officer for the Workhouse of the Poole Union.
- FARRANT, S., Esq.—Medical Officer for the St. James's District of the Taunton Union.
- FERNANDES, A. L., Esq.—House-Surgeon to the Sheffield General Infirmary.
- FIRTH, J. F., Esq.—Surgeon to the Workhouse and East Division of the parish of Rotherhithe.
- FRANKLYN, L. H., Esq.—Medical Officer for District No. 9 of the Lexden Union, Essex.
- HARRIS, J. C., Esq.—Medical Officer for District No. 1 of the South Stoneham Union.
- HARRIS, R. D., Esq.—Medical Officer for the Workhouse of the Kingston Union, Surrey.
- HARVEY, A., M.D.—Joint Lecturer on Clinical Medicine at the Royal Infirmary, Aberdeen.
- HAWKINS, E. W., Esq.—Medical Officer for the Limehouse District of the Stepney Union.
- HAYDON, N. J., M.D.—Medical Officer for the No. 2 District of the Newton-Abbot Union.
- HAYES, T. E. D., Esq.—House-Surgeon to the Kent County Ophthalmic Hospital.
- HOLDEN, L., Esq.—Surgeon to the Foundling Hospital.
- JEPSON, G. T., Esq.—Medical Officer for the Hampton Wick District of the Kingston Union.
- JONES, J. T., M.B.—House-Surgeon to the Infirmary, Loughborough.
- KEBBEY, W. H., Esq.—Medical Officer for the Huyton District of the Prescot Union, Lancashire.
- KERR, B., Esq.—Medical Officer for the Kilsby District of the Rugby Union.
- KITTSO, J. B., Esq.—Medical Officer to the Newport District of the Nenagh Union, County Tipperary, Ireland.

- KNOWLES, E., Esq.—Medical Officer for District No. 1 of the Cambridge Union.
- LEONARD, T., M.D.—District Medical Officer of the parish of St. Leonard, Shoreditch.
- LEWIS, D., Esq.—Resident Medical Officer to the Dispensary, Newport, Monmouthshire.
- LOUGHNAN, C. F., M.D.—House Surgeon to the North Dispensary, Liverpool.
- LUTHER, F. M., M.D.—Medical Officer for the Cappoquin Dispensary District of the Lismore Union, County Waterford, Ireland.
- M'GILL, A., M.D.—Medical Officer to the Ashburton District of the Newton-Abbot Union.
- M'GREEVY, N., Esq.—Apothecary to the Drogheda Union Workhouse.
- MULLAN, W. J., Esq.—Medical Officer to the No. 1 District and Workhouse of the Rye Union, Sussex.
- PAGE, F., M.D.—Medical Officer to the Portsmouth, Portsea, and Southsea Union Workhouse.
- PEARCE, J. W. Esq.—Medical Officer to the Farcet District of the Peterborough Union.
- PEARSON, T. R., Esq.—Assistant Medical Officer to the Middlesex County Lunatic Asylum, Colney Hatch.
- PUGH, J. L. P., Esq.—District Medical Officer to the Halifax Union.
- RAWLINS, F. W. A., M.D.—Medical Officer for the Stoke Newington District of the Edmonton Union.
- RICHARDS, J. P., Esq.—House-Surgeon to the Stockport Infirmary.
- ROE, W., M.D.—House-Surgeon to the Liverpool Southern Dispensary.
- RYAN, J. J., M.D.—Medical Officer for the Waterford Dispensary District of the Waterford Union.
- SPICER, R. H. S., M.D.—Medical Officer for No. 11 District of the South Molton Union, Devon.
- STATHAM, H. W., Esq.—Apothecary to the Foundling Hospital.
- STEPHENS, D. W., M.D.—Medical Officer for the Warblington District of the Havant Union.
- TIPPLE, F. A., Esq.—Medical Officer for No. 2 B District of the Dartford Union.
- TIZARD, H., M.D.—Medical Officer for the Melcombe-Regis District of the Weymouth Union.
- TURNER, J. S., Esq.—Assistant Dental Surgeon to the Middlesex Hospital.
- WALLACE, R. U., Esq.—Medical Officer for the District of St. Leonard, Shoreditch.
- WILLIAMS, D. M., Esq.—Medical Officer for District No. 9 of the Newport-Pagnell Union, Bucks.
- WILLIAMSON, W., M.D.—Joint Lecturer on Clinical Medicine at the Royal Infirmary, Aberdeen.
- WRIXON, J., Esq.—Medical Officer for the Surratt District of the Watford Union, Herts.

DEATHS.

- ABRAHAM, Thomas, M.D., late of New Broad-street, City, at Marsden Villa, Haverstock Hill, on July 16, aged 56.
- ACHESON, J. H., Esq., F.R.C.S., Surgeon R.N., at Dalkey, County Dublin, on July 8, aged 77.
- BARNES, John, M.D., formerly of Tavistock-place, at Rupert-road, Upper Holloway, on July 18, aged 63.
- BATEMAN, J. A., Esq., Surgeon, at High-street, Shadwell, on July 17, aged 46.
- BELL, William, M.D., at George-street, Hanover-square, on July 23rd.
- BIRD, James, M.D., at Fern-Acre Lodge, Gerard's-cross, Bucks, on July 10,

aged 67. The deceased was formerly Physician-General to the Bombay Army, and subsequently Lecturer on Military Surgery and Tropical Medicine and Hygiene at St. Mary's Hospital. He was an active member of the Medical and Epidemiological Societies. He was foreign secretary for India to the latter Society, and was a vice-president and treasurer to the Medical Society, of which he was Lettsomian Lecturer in 1862, choosing for the subject of the course his favourite study of Public and Private Hygiene. He was also the author of numerous valuable works and detached papers upon Hygiene and Medicine.

BOWIE, W., M.D., at Bath, on July 3, aged 71.

BURRIDGE, R., M.D., at High-street, Taunton, on June 28, aged 51.

DON, James, M.D., late Surgeon-General, Bombay, at Bearchill, Brechin, Forfarshire, N.B., on July 18.

EDGER, T. S., M.D., J. P. for the county of Durham, at Gainford, Durham, on June 20, aged 66.

ELLIOTT, George, Esq., M.R.C.S., at Aspatria, Cumberland, on July 16, aged 68.

FELL, W., Esq., M.R.C.S., at Ambleside, Westmoreland, on July 18, aged 62.

FORRESTER, William, Esq., Surgeon Madras Army, on board the steam-ship "Nubia," in the Red Sea, on the homeward passage from India, on June 30, suddenly, aged 45.

GIBSON, John, Esq., Surgeon, at Tarbolton, Ayrshire, on July 7.

HEELAS, Newton, Esq., late Senior House-Surgeon, Northern Hospital, Liverpool, at Wokingham, on June 25, aged 29.

JONES, T. R., M.D., of Aberystwith, on July 7, aged 35.

MARRIOTT, Dr., late of Basle, Switzerland, at Stuttgart, on July 4, aged 66.

PATTISON, W. T. M., M.D., at Portland-place, Bath, on July 6.

SMITH, J. C., Esq., late Surgeon, Bengal Army, at Rydal, on June 28, aged 54.

YOUNG, W. P., Esq., L.R.C.S.I., of James's-street, Dublin, Demonstrator of Anatomy at Steevens' Hospital, on July 8.

BOOKS RECEIVED.

"On the Use of Perchloride of Iron and other Chalybeate Salts in the Treatment of Consumption." By James Jones, M.D.

"On Combined External and Internal Version." By J. Braxton Hicks, M.D.

"Cases of Tracheotomy in Croup, with Clinical Remarks." By James Spence, F.R.C.S.

"On Tracheotomy in Diphtheritic Croup." By the same author.

"Clinical Lectures on Pulmonary Consumption." By the late Theophilus Thompson, M.D. Edited by E Symes Thompson, M.D.

"Observations on Indigestion in Early Phthisis." By E. Symes Thompson, M.D.

"On Corpulence ; its Diminution and Cure, without Injury to Health." By J. Harvey, M.D. "Notes of Fifteen Cases of Diseases Dependent upon Corpulence ; with Result of Treatment." By the same author.

"On Sore Throat ; its Nature, Varieties, and Treatment. Including the Use of the Laryngoscope as an Aid to Diagnosis." By M. Prosser James, M.D.

"The Journal of Mental Science," for July.

"The Pharmaceutical Journal," for July.

"Gazette Médicale de Paris," for July.

"The Social Science Review," for July.

"The Dental Review," for July.

"Journal de Médecine Mentale." February, March, and June numbers.

"Lunacy and Law ; with Hints on the Treatment of Idiots." By T. E. D. Byrne, L.R.C.P.

ANSWERS TO CORRESPONDENTS.

A VICTIM (Bristol), will see that the subject is noticed in the present number.

M. D.—The new edition of the Pharmacopœia will not be ready for a considerable period. It is, however, in progress, and Mr. Warington, Chemist to the Apothecaries' Company, and others, are actively engaged in practical business connected with it. We do not ourselves hold a very high estimate of the British Pharmacopœia, and we regard the book as being, by no means, an equivalent to the money, labour, and time devoted to its compilation. Still, it must be acknowledged, that it is superior to any previous work of a similar nature, and it must not be ignored that some able chemists, amongst whom is Dr. Thudichum (*vide* the remarks contained in his Oration in the present number), speak in defence, and even in praise, of the British Pharmacopœia.

G. R.—Dr. Aitken's "Science and Practice of Medicine," contains the most recent views on the subject. In French, you will find that Trousseau's Clinical Lectures, delivered at the Hôtel Dieu, will answer your purpose admirably.

DUBITANS.—We should strongly advise you not to commit so suicidal a step, so far as your future prospects are concerned, as entering the Army Medical Service. The Council of the Edinburgh College of Physicians stated in their recent spirited memorial to Lord Palmerston, that "assistant-surgeons now commencing service cannot look forward to promotion in less than fifteen years." This is bad enough, but from a trustworthy calculation which has been forwarded to us, *twenty* years would be, perhaps, still nearer to the mark.

ST. BARTHOLOMEW'S.—Abernethy died in 1831, at the age of 67. He was President of the College of Surgeons in 1820. With respect to the opinion which you heard advanced, to the effect that Abernethy has been much "over-rated," we may remind you that this sneering way of speaking of men of merit after their deaths is not uncommon. We once heard a so-called poet, who apparently thought that jingling rhymes constituted real poetry, say at a public meeting that Shakspeare had been "over-rated." This was only another instance of the impudence which living asses are proverbially said to show in kicking the remains of dead lions.

A. B.—Send the paper. If suitable for our columns, we will insert it ; if not, it shall be returned.

A PARENT.—The hospital named in your letter is one of the best to which you could send your son.

DR. W.—A collection of good prescriptions is really valuable, and the formulæ appended to such books as "Hooper's Physician's Vade Mecum," and "Druitt's Manual of Surgery," greatly enhance their utility. One of the oldest members of the medical profession, an octogenarian, who has paid much attention during a long and useful career to the subject of Practical Pharmacy, and who published some interesting papers upon it upwards of forty years since, has kindly offered to send us occasional communications, giving a series of formulæ of important prescriptions, which he has, at various times, collected and preserved.

THE MEDICAL MIRROR.

SEPTEMBER, 1864.

ORIGINAL COMMUNICATIONS.

On the Alkaloids of Peruvian Bark. By JOHN ELIOT HOWARD,
F.L.S., &c.

I EMBRACE with pleasure the opportunity afforded by the pages of the "Medical Mirror" to invite increased attention to the specific therapeutic effects of the several alkaloids contained in the family of the Chinchonæ. Much has already been effected in this direction, but much more remains to be accomplished, as is evident by the varying and even opposite conclusions arrived at in reference to some of these agents. Having myself been occupied more than thirty years in the extraction of quinine and other products of these barks, I have taken occasion to administer gratuitously the cheaper products of the process to persons affected with ague in the surrounding marshy district, and to many others who have applied from distant localities, and have thus had the opportunity of acquiring a good deal of experience of their efficacy, and of ascertaining this fact, that without employing at all so costly a material as quinine, it is possible to combat successfully the varied forms assumed by intermittent fever. I have, in very many cases, succeeded, even where the patients had been under treatment in dispensaries, hospitals, or even in private practice, without cure. The reason of this is not to be found in any discovery of mine, but simply in putting into practice the course of treatment recommended by the best authorities on the subject. Amongst these I would especially mention the work of Briquet* on the alkaloids of bark as the one which I have chiefly followed.

The grand desideratum appears to be the possession of a remedial agent sufficiently powerful to be relied upon alone, and sufficiently cheap to allow of its being administered in

* Briquet, Sur les Alcaloides des Quinquinas. Paris, 2nd ed., 1855.

the large doses required to arrest at once the paroxysms of the complaint. I am at present employing the commercial *muriate of cinchonine* for this end, as I have no reason to doubt its efficacy; and, although given in larger doses, it must be much cheaper than either quinine or quinidine.

The merits or demerits of this remedy ought certainly to be defined by well conducted experiments, those of Briquet leading to the conclusion that it may be employed with advantage in ordinary cases, whilst medical observers in the East and West Indies differ as to the propriety of its exhibition in the fevers of hot countries.

Cinchonidine (which must not be at all confounded with cinchonine) is an alkaloid which experience has led me to value highly. I have treated successfully with this alone the most fatal forms of intermittent fever occurring in this country, called in some districts "the dead ague," in which the external exacerbations of fever subside, but the spleen enlarges, and dropsy and death supervene. I may also mention that this must have been the alkaloid which cured the Countess of Chinchon, since the *Chinchona chahuarguera*, to which (by tradition) her cure is ascribed, is specially rich in this product. Moreover, the cases of intermittent fever reported in the American Journal of Science, as successfully treated by *Quinidine*, were really treated by *cinchonidine*, as I have elsewhere shown.* The *real* relationship of *cinchonidine* is to *quinine*, and not to *cinchonine*, as its name unfortunately implies. I am much inclined to believe that cinchonidine produces less cerebral disturbance than quinine, and the late Dr. Royle (of East Indian celebrity), who, at my request, tried several experiments with it, concurred with me in this opinion. If this should prove to be the fact, it would surely be a very important one for the interests of humanity.

Quinidine has, probably, some peculiarity in its action on the system; but this has to be ascertained. It is important that it should be understood that the (so-called) quinidine of commerce is more often wholly or in part cinchonidine.

Aricine has given such discouraging results in my hands, that I have not ventured to employ it. I have been led to suspect emetic qualities in the accompanying yellow colouring matter. The importance of investigation of this alkaloid will appear in the following observations.

The drug sales in London show how very large is still the quantity of Peruvian bark which must be consumed in tinctures or decoctions, or in some way pass into medicinal

* See my "Quinologia" under the head of *Chinchona Chahuarguera*.

use, and thus present the effects of those alkaloids which are most abundant in each kind. In the "Crown barks" generally, *cinchonidine* may be regarded as predominating, though in one sort (the *Amarilla del Rey*), quinine is found in considerable quantity. In the "Grey barks," *cinchonine* is the prevailing element. In the red barks, quinine, cinchonidine, and cinchonine form a triply compound agency. In the Calisaya (which is employed, in part, for tinctures and decoctions), quinine is the ruling power. In addition to these serviceable barks, there is also a large importation of barks called Peruvian, which are utterly unserviceable, and which nevertheless pass into medical practice. I have shown that, after the time of Dr. Saunders, the spurious *quina nova* took the place of the genuine red bark, leading to the conclusion that fevers had increased in their severity, or else that the red bark was an inferior remedy. There has been more than a little of this imported even of late years. There are several kinds of Peruvian bark in which the only alkaloid is *aricine*, and yet these are rather in favour, and command good prices. I confess I pity the unfortunate consumers.

It cannot surely be regarded as a matter of indifference whether the patient is absorbing *quinine*, *cinchonine*, *cinchonidine*, *quinidine*, or *aricine*, from the Peruvian barks, to which he is to trust for convalescence; or whether the *quinovic acid* be the alone bitter principle which he receives to promote his recovery, as will be the case if the bark (*quina nova* for instance) be that of a *Ladenbergia* instead of that of a *Chinchona*.

To cut this knot, some propose to give only known preparations, such as citrate of iron and quinine: but then again it is said, and probably with truth, that the effect of the bark itself is somewhat different and, perhaps, better if the patient be so happy as to meet with the kind of bark which suits him. But then who is to secure this auspicious result?

In treating intermittent fever, experience has led me to find the truth of what Briquet shows, that it is best to trust to the alkaloid *alone*, and to strike a blow with a sufficient quantity of this in order to arrest the disease. I do not, however, advocate giving at a single dose more than, say, five grains of sulphate of quinine, or an equivalent of the other alkaloids, and this repeated three times in twenty-four hours. In seeking to restore the normal state of the constitution after the fever is arrested, the citrate of iron and quinine is very useful; and unless some such treatment is pursued, the ague is very apt to recur, as I have known to happen through a simple shock to the nervous system; but, if the plan I have described be followed, there is no variety

of this Protean malady (including what is called "Brow Ague," and other singular allied affections,) which I have not found yield to the treatment. The remedy is so sovereign, that, in my opinion, the physician ought not to fail in arresting the paroxysms of intermittent fever, and this, if expense be an object, even without the exhibition of quinine.

Essays and Reviews on Affections of the Nervous System, including their Pathology and Treatment. By WILLIAM CAMPS, M.D., Member of the Royal College of Physicians, London, &c., &c.

PRACTICE WITH SCIENCE.

No. 1.—*On Hysteria, and the Hysterical Constitution and Temperament.*

(Continued from page 476.)

It must have occurred to the observation of all intelligent medical practitioners, that amongst the many, the various agencies, operating to produce disorders, well or imperfectly recognized, of the nervous system, a suppression or non-evacuation of healthy, natural discharges, or secretions from the human body, whether male or female, would be one of the most common and efficient of all known influences tending to such derangements of health.

This being so, it is not surprising, indeed it is no more than might be expected, that in a disease like that under consideration, Hysteria, or in a class of diseases commonly spoken of as Nervous Diseases, which, like hysteria itself, more generally affects the female than the male sex, the suppression or non-evacuation of the natural periodical secretion peculiar to woman should, in many instances, play a most important part in the production of such diseases.

In the last number of the "Medical Mirror," at page 474, I briefly adverted to the bad results of suppressed secretions or excretions of the body, as conducing to the development of the hysterical constitution or temperament, and as time and space on that occasion did not admit of any lengthened discussion of this subject, although one of the highest pathological importance, in fact, I scarcely know of one that is more so—except, possibly, the influence of the passions—and therefore I intend, so far at least as the suppression of the menstrual secretion of the female is concerned, to appropriate this present communication, or the greater part of it, to the

consideration of this subject. One other reason prompts me to this design just now, a reason, I presume, such as would weigh upon every other medical practitioner who found himself in my place. The subject is fresh and vivid before my own mind, having at this time two cases under my observation, in which the suppression or cessation of the accustomed menstrual evacuation has had much, if not nearly all, to do in evoking a series of hysterical symptoms of an aggravated nature, so aggravated as, happily, not commonly to be met with or observed, in which the influence of the suppression or cessation of this secretion is very well marked, and in which nature is taking her accustomed course, but from some cause or other taking that course attended with deviations of a most irregular, troublesome description.

In the following remarks I shall by no means restrict myself to that period of life, as in these two instances just mentioned, at which the menstrual discharge or secretion ceases of itself, or naturally, as it is termed; but, on the contrary, I will include the entire period of female life, from the age of fourteen or fifteen up to forty-five or fifty years of age. The natural menstrual secretion peculiar to woman may, and frequently does, conduce to the development of various diseases of the nervous system, and, amongst others, to the development of hysteria in several, yet altogether different conditions; as, for example, in young persons in whom this natural evacuation is about to take place at first; in persons of delicate sensibility, at every period of its reappearance; in persons in whom it becomes suddenly suppressed; in persons of a similar constitution at the usual natural period of its cessation, which, as in the two cases above briefly referred to, is commonly in this country at about fifty years of age; it may also lay the foundation of many distressing, troublesome symptoms, affecting the nervous system when it becomes too abundant, especially if, at any time, amounting, as it sometimes does, almost to hæmorrhage. The approach of the period of puberty, in either sex, male or female, is always more or less critical, yet, in the female, it is peculiarly so, for many and obvious reasons, amongst others, for the supervention of the special secretion now adverted to; another reason being this, that in females the nervous system is commonly more delicate and more highly developed than in males; and in consequence thereof the sensibility and mobility of the entire framework of the body are more easily excited than in males; and, moreover, their ordinary mode of life conduces to many accidents tending to evoke and establish disorders of the nervous system, whereas the ordinary mode of life amongst young persons of the opposite sex offers an easy

remedy to such accidents, either by way of prevention or of cure.

The concurrence of many accidental circumstances to females at this period of life, favours the production of a high degree of mobility and of sensibility in the nervous system; and it is by no means rare to witness in such, at this period of life, an extremely nervous and hysterical tendency; and which may continue, and even increase, in intensity, until the natural periodical secretion is completely and regularly established. At no period of life is it of more importance to direct attention to whatever may tend to strengthen and fortify the nervous system, in readiness for the numerous and daily recurring exigencies of life and of society.

All of us, as medical practitioners, must be perfectly familiar with numerous cases of this nature, by way of illustration of the foregoing remarks.

The suppression, however, of the natural periodical secretion is very commonly attended with phenomena denoting extremely important disorder of the nervous system, even after it shall have been well established, and for some time even performed with due regularity.

Hysterical and other symptoms affecting the nervous system occurring concomitantly with suppression of the menstrual discharge, whether they operate in the relation either of cause or of effect as regards the suppression, will, as I know, assume the most extraordinary character, so as almost to surpass belief; and I have no doubt that in days now happily gone by, in days of darker ignorance than the present, such cases imperfectly recognized, and inaccurately observed, were, by the unthinking and unreflecting, ascribed to evil, if not to satanic influence, in fact, such unfortunate patients were spoken of as being *possessed*.

Some time ago, I had a patient under my care affected very much after this mode, and in whom the customary periodical evacuation peculiar to females was totally suppressed for many months, in fact, writing now from recollection, I may say, for upwards of twelve months, and whose conduct at times during this period was very extravagant and very extraordinary. I have myself witnessed in this patient some of the most out-of-the-way actions. I have seen this patient cling to and clamber up her bedposts as we may see cats cling to and clamber up posts or trees; on other occasions I have seen the same patient crawl along the floor of the room and over objects lying in the way, just as we may see some reptiles and other lower animals crawl along the ground. This patient was an intelligent person, and would sometimes describe her own condition as that of one

possessed, and who needed to be *exorcised*. All these irregular extravagant actions subsided, and ultimately totally disappeared upon restoration of the bodily health, including a regular return of the usual periodical secretion peculiar to females.

The nervous system of females, especially of such as are liable to hysteria in any of its varied forms, is extremely likely to become more or less affected at the period of life when this periodical secretion altogether ceases or becomes permanently suppressed.

One of the most distinguished practical physicians of the last century, our own countryman, Dr. Fothergill, in his valuable work entitled "*Medical Observations and Inquiries*," has treated most ably of the management proper at the period of the cessation of the menses in females; and to this work of Dr. Fothergill I take the liberty to refer such of my readers as may be interested in this particular department of pathology. This work is not now before me, and therefore I do not offer any quotations from that author; and, besides, his observations therein are not specially directed to disorders and derangements of the nervous system, whether hysterical or otherwise; therefore I content myself with merely directing attention to one of the most useful and practical essays in our own language bearing upon that subject, without especial reference to nervous pathology.

At this period of life, and under the circumstances in which the human female is then placed, it cannot be matter of surprise that the nervous system in that sex should at that time in many females become liable to the supervention of any symptoms whatever denoting disorder or derangement of that system, and the hysterical, more, perhaps, than any other females, become affected with various forms of that proteiform disease to which they are so unfortunately subjected.

In order to confirm, to corroborate the statements that have been hitherto advanced on this subject, let us now consider, and endeavour to realize to our minds, what is the actual state of things with which we have to deal; for, in my opinion, few conditions in which the human body can be placed (and be it observed, I am now speaking exclusively of the human female), will illustrate more pointedly the pathological principles which it is the express object of these essays on affections of the nervous system to teach and to enforce. Let us, I say, present vividly to our minds what is the precise pathological condition of a human female, of a nervous, and still more so, of one of a decidedly hysterical constitution or temperament, at the time of the suppression or of the cessa-

tion of the customary periodical evacuation of the menses. What may we reasonably expect, or, to speak more emphatically, what may we not reasonably expect, as the result of the present actual state of things in such subjects? What do we not, on some occasions, meet with in our patients at this so well denominated critical period? I do not hesitate to affirm, that the very worst, the most troublesome cases, of the nervous and hysterical class, that I have met with, have been in females at this time of life.

Nor need this be matter of surprise to us, as practitioners, under the circumstances in which our patients are then placed. For, what is then the condition of the entire mass of the blood then circulating throughout the body, and thereby affecting the entire mass of the nervous tissue of the framework, whether this nervous tissue be in the form of nerve fibre or of nervous ganglia? Some of the older physicians have spoken of the blood at such periods as being an acrid fluid, and some others have even spoken of it as possessing poisonous properties; but, without going so far as these, we may, I think, confidently regard the blood of the human female at such times, and speak of it, as an impure, unpurated, unpurified fluid pervading the entire framework of the body. This being so, need we be surprised to meet with, in the nervous, and in the hysterical, vitiated secretions of one or more organs; ought we to be surprised to perceive in some, the indications of vitiated, perverted sensations; to perceive in some, evidences of vitiated, perverted emotions; and even in some few, evidences of a vitiated, perverted intelligence? An application of the soundest medical reasoning would almost lead us to expect the existence of many such phenomena under such existing circumstances. For if blood degeneration betokens, nay more, if it involves or implies thought degeneration, is it not to be expected that it (that is, blood degeneration) should still more betoken, involve, or imply sensation degeneration, motion degeneration, secretion and excretion degeneration, and in fine, tissue degeneration, with all its essential, necessary, concomitant derangement and disorder of the entire material framework of the body? Surely, it is merely to reason from anatomy and physiology to pathology, to advance and maintain such opinions as those just now heretofore enunciated. All the phenomena observable in nervous and hysterical patients at this time of life combine to lend support, and to substantiate the correctness of, the views here laid down. It is more particularly at this time of life, and under these circumstances, in which we have to do with the human system suffering in the ordinary course of nature, from a depraved, vitiated,

degenerated condition of that vital fluid, the blood, that we meet with those exceedingly troublesome, nervous and hysterical disorders, which almost invariably, when at all severe and protracted, despoil life of its pleasures and its enjoyments, and which at the same time are such a frequent source of anxiety and annoyance to the friends and acquaintances of our unfortunate patients.

It is moreover, under these and similar circumstances, that those nervous disorders and derangements of the bodily health supervene, in which, in consequence of their influence on the moral nature and character of our patients, they are unhappily disposed to regard nearly all surrounding occurrences from a wrong, a perverted point of view, and these wrong, these perverted aspects of surrounding occurrences determine their ordinary conduct and behaviour; and deporting themselves accordingly, their common course of actions is thus rendered an enigma, a mystery alike to themselves and to their acquaintances; in fact, such sufferers may be said to have undergone an unfortunate change, an unhappy metamorphosis as well of mind as of body. Incomplete, however, as our present knowledge on these topics must be confessed to be, we yet possess sufficient evidence to convince us, that the quality of the blood must have considerable effect, more or less, as the case may be, not only upon the circulation of that fluid itself, but also upon the various tissues of the body subjected to its influence. We cannot but admit that this must be so, looking at the complex composition of the blood when in health, a composition intimately connected with its own proper vitality, and which has, at the same time, such important relations to every part and to every organ of the body, including especially those parts and those organs of the body, recognized as constituting the nervous masses making up the entire nervous system. Under the head of treatment of hysteria, I shall hope to enlarge much further upon this important pathological subject; for the present, however, I content myself with stating, that both the cerebral and the ganglionic nerves must be engaged in this relation; but in what precise intercommunication with each other, and with the entire mass of the blood, and the vascular system, neither anatomy nor physiology have as yet sufficiently explained; still, these sciences have, even now, afforded us sufficient evidence that these most important relations between blood and nerves do exist.

(To be continued.)

On Enlarged Tonsils, and their Treatment without Cutting By MORELL MACKENZIE, M.D., London, Member of the Royal College of Physicians. (Two Lectures delivered at the Dispensary for Diseases of the Throat.)

LECTURE II.

(Continued from page 471.)

GENTLEMEN,—In my last lecture, I told you, that following in the footsteps of Dr. Fournié, I had struck upon a new path for reducing hypertrophied tonsils. The effete practice of applying caustics, alteratives or absorbents, to the enlarged glands has been abandoned, and a positive effect has been accomplished by the aid of escharotics.

The "London Paste" which I employ (consisting of caustic soda and lime, moistened with a little alcohol) is made for me by Messrs. Bullock and Reynolds, of Hanover Street, Hanover Square. In preparing it, it is extremely important to employ absolute alcohol. If spirits of wine be used instead, the bulk of the paste is very much increased, and its causticity proportionably diminished. In addition to this, the water in the spirits of wine causes the paste to dry up very quickly, and makes it necessary to moisten it with fresh spirit every time it is employed. The mixture of caustic soda and lime has a powerful affinity for carbonic acid, and if exposed, it rapidly absorbs it from the air, and loses its causticity. The paste should therefore be carefully kept in a stoppered bottle.

The compounds of the caustic alkalies and unslacked lime possess a power of destroying animal tissues, which is unequalled by any substance that can be safely applied at the back of the throat. I must remind those of you, however, who have been in the habit of employing Vienna Paste for surgical purposes, that whilst to make an issue it is necessary to keep the paste applied for ten or twenty minutes, neither it nor the London Paste *must remain in contact with the hypertrophied tonsil for more than five seconds.* The London Paste, as compared with the potash caustic, possesses, according to my observations, the following advantages:—

- I. It tends to penetrate, rather than to spread circumferentially.
- II. Its action, though less violent at the moment of application, continues for a much longer time.
- III. It causes much less pain,

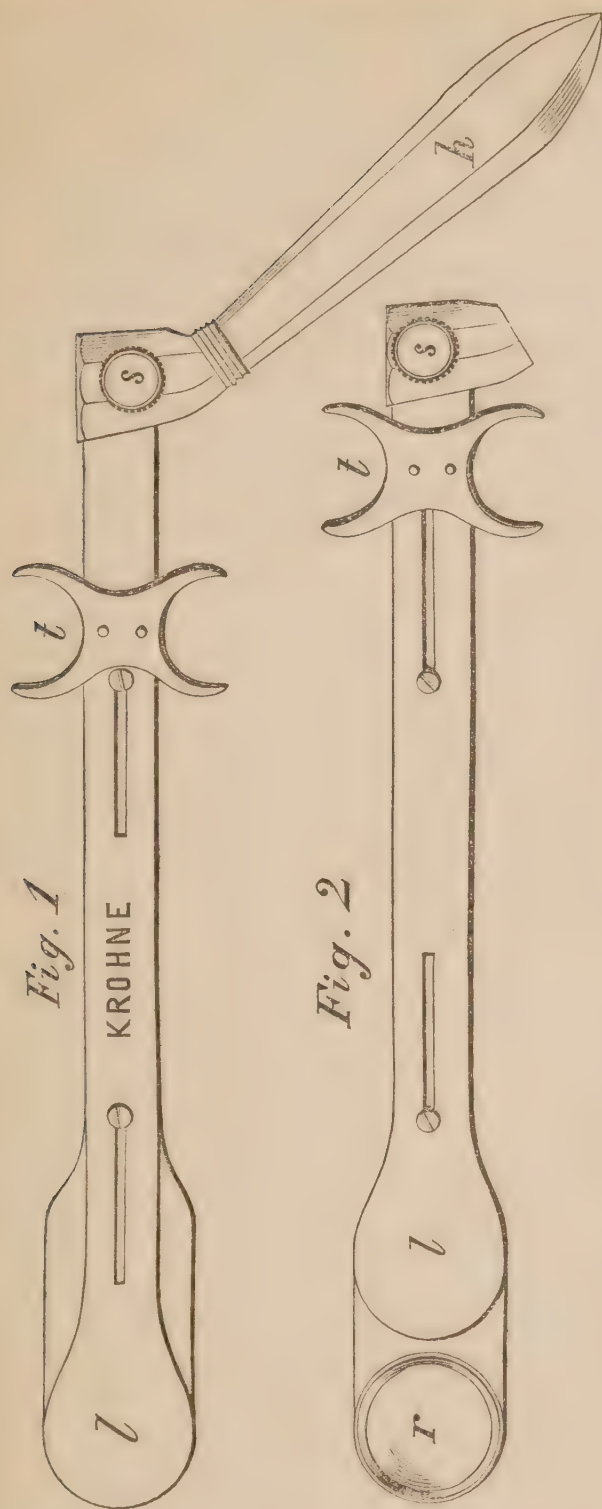


Fig. 1.—The instrument closed.

Fig. 2.—The instrument open.

(*t*.) Trigger, by which the lid (*l*) is moved backwards and forwards.

(*r*.) Receiver, into which the paste is put.

(*l*.) Lid, covering the receiver in Fig. 1, and drawn back in Fig. 2.

(*s*.) Screw, by which the horizontal portion of the instrument is fixed into the handle (*h*).

By this arrangement the instrument can be used for either tonsil.

For applying the London Paste to the tonsil, and for preventing its accidental contact with parts not meant to be touched. I have had a little instrument contrived which answers its purpose well. You see that it somewhat resembles the guillotine of Mr. Luke, though instead of a steel ring with a sharp blade behind it, there is a kind of circular shallow spoon or receiver, into which the escharotic is put; the receiver is

provided with a lid or cover, which, when the instrument is grasped in the hand, can be pushed forwards or backwards by the action of the index finger on a kind of trigger, or half-ring placed near the handle. The instrument is introduced closed, and when opposite the tonsil the lid is drawn back from the receiver, and the latter with its contained paste is pressed firmly against the hypertrophied gland for about five seconds. The lid is then pushed forwards over the receiver, and the instrument withdrawn. You see that the horizontal portion of the instrument is made of vulcanite—a substance which is not materially acted upon by London Paste. I call your attention also to the fact that the horizontal portion of the instrument is fixed into the handle by a screw in such a way that it can be reversed and thus used for either the right or left tonsil. In employing the instrument, I generally introduce it with my right or left hand, according as I wish to operate on the patient's left or right tonsil; whilst with my other hand I press the receiver firmly against the enlarged gland. I also frequently employ the free hand for pulling the trigger backwards or pushing it forwards, that is to say, for uncovering or covering the paste. For operating on children it will be found convenient to employ a smaller instrument. The same handle will of course do for two or three "receivers" of different shapes and sizes.

The instrument I have described is made by Mr. Krohne, of Whitechapel Road. It renders the employment of a strong semi-liquid escharotic easy and safe. Whilst recommending its employment to others, I must confess that it is only quite lately that I have made use of it myself. In more than twenty cases, I applied the paste with a small glass rod, or the wooden stick of a pen-holder. The following was my mode of procedure. The paste was first prepared. Care was exercised that it should be neither too thin nor too thick. If too thin, it is apt to run about and burn parts which should not be touched. On the other hand, if the paste is lumpy, there is the risk of fragments being swallowed. The glass rod was then dipped into the paste, great care being taken that the latter did not cover more than an inch of the rod. The patient was then placed in the position for laryngoscopy, and the fauces illuminated. In applying the paste it will be found very convenient to throw a strong light into the throat, with the large reflecting mirror of the laryngoscope. This is not absolutely necessary, but the difference between the dull day-light—partially obstructed by the operator's head and hands—and the brilliant illumination obtained by reflected light, is so great, that the mirror has only to be employed once to ensure its always being used.

afterwards. Still those who are not accustomed to use the laryngoscope may safely apply the paste without artificial illumination. In this case the operator must choose a fine day, and should sit close to the window, with his back to the light, whilst the patient sits facing him.

To continue: The patient being ready, he was directed to open his mouth widely, and whilst with one or two fingers of my left hand I pressed the tongue down firmly, with my right hand I applied the paste.

Directly the tonsil is touched with the paste a straining movement takes place in the throat, and the tonsil is violently pushed out towards the median line. In this way, a large surface of the gland is exposed, and the paste can be applied with great facility. I stated just now that it was convenient to use a smaller instrument for operating on children than on adults. But it is so impossible to explain the object of an instrument to frightened children, that in destroying their tonsils, I generally apply the paste with the glass rod in the manner described. With reflected light at one's command, it is really astonishing how easily and how quickly operations at the back of the throat can be conducted, even on unwilling subjects. In employing the instrument which^aI have shown you to-day, as the paste is concealed, it is not necessary to press down the tongue with the forefinger of the left hand.

In making use of either London or Vienna Paste, it is convenient to have a little vinegar at hand, so that if the back of the tongue or any other part has been accidentally touched, the caustic action can be at once arrested. To avail oneself of the neutralising property of vinegar however, it must be applied *immediately*. If its application is deferred, it only irritates the already inflamed part.

The application of the paste for a few seconds causes more or less pain. Some patients complain very much; others do not seem to think much of it. The pain lasts from five to ten minutes. Afterwards there is a feeling of a sore throat, and some discomfort in swallowing. This generally continues for two or three days. On examining the tonsils shortly after the application of the paste the mucous membrane appears of a bright red colour; streaks and patches of dark blackish blood, and white shreds of altered membrane, are seen at the back of the mouth. The next day, the tonsil is covered with a white eschar. The paste should be again applied after an interval of three or four days. The subsequent employment of the escharotic is generally attended with less pain than its first application. The largest tonsils can generally be reduced to a normal size in about a

month. The paste should be applied about twice a week. The London Paste not only actually destroys a certain portion of tissue, but it greatly weakens the vitality of the subjacent tissues. The cohesion of the gland is impaired, and it becomes soft, and very friable. In proof of this, I may observe that after applying the paste once or twice, it is easy to push a glass rod into and even through the gland.

Dr. Fournié has employed the Vienna Paste for destroying the elongated uvula, and I have used both it and the London Paste for that purpose. The application of escharotics however to the uvula is difficult and unsatisfactory. The extreme mobility of the uvula makes it impossible to apply the paste firmly and steadily, and hence it often happens that the upper part of the uvula is partially destroyed, whilst lower down it is little affected. Besides which, the application of the escharotic to the uvula causes much more pain than when the tonsils are destroyed in the same way. Though I have thus been able to get rid of the uvula in one or two cases, its removal with the knife is so easy and safe an operation, and attended with so little pain or hæmorrhage, that it is certainly the preferable mode of treatment. I do not recommend therefore the use of escharotics for destroying the hypertrophied uvula.

The following are some of the cases of enlarged tonsils which have been treated by the application of London Paste.

Case 1.—Bartholomew V., æt. 16, a bricklayer, applied at the Dispensary for Diseases of the Throat, in December, 1863. The tonsils had been enlarged since childhood, and he was subject to repeated attacks of quinsy. The voice was indistinct and nasal. Both tonsils were much enlarged, but the left gland had attained an enormous size. He stated that "he generally had an inflamed sore throat four or five times in the year." I recommended that the left tonsil should be removed with the guillotine. The patient would not consent to a cutting operation, but ultimately agreed to have the tonsil gradually destroyed. The paste was first applied January 4th. The patient did not complain of its causing much pain, though his nervous apprehension of a surgical operation made me fear that the paste would give rise to much suffering. The next day, the tonsil was covered with a large eschar, and the patient complained of there being even "less room in his throat" than usual. Two days later the slough had separated.

January 8th.—London Paste was again applied. The treatment was repeated on the 12th, 16th, and 21st. The

paste was not again applied to the left gland, but on the 23rd and 27th it was put on the right tonsil.

February 6th.—The patient was discharged “cured.” On examining the throat on the day of his departure, the pharynx had such a healthy appearance that it would have been impossible for any one unacquainted with the circumstances of the case to have guessed that any treatment had been adopted.

Case 2.—Susan S., æt. 17, training to become a professional singer, applied at the Dispensary in June, 1863. Both tonsils were much enlarged, and she had been repeatedly recommended to have them cut out. To this she would not consent. The voice had a disagreeable intonation. This girl was pale and chlorotic, and I recommended change of air. She spent three months at Margate, and whilst there took a mild preparation of iron. When I saw her in September she was greatly improved in health, but the tonsils had not diminished at all. I then applied the compound tincture of iodine to the tonsils every three or four days for a period of six weeks. The tonsils did not appreciably diminish in size.

January 6.—I first made use of the London Paste, applying it to both tonsils.

January 8.—The right tonsil had shrunk to a quarter its former size, and the left tonsil was also much smaller.

January 16.—The paste was applied for the second time. It was not necessary to use the escharotic again, as a few days later a careful inspection showed that the tonsils were reduced to a normal size. It is difficult to account for the extreme rapidity with which the hypertrophy disappeared in this case. It must be remarked, however, that the patient dated the enlargement of the tonsils from an attack of scarlet fever which had occurred two years previously, so that the hypertrophy was of comparatively recent origin. On the other hand, it is just possible that though the previous prolonged application of iodine produced no effect at the time, it may have had something to do with the subsequent rapid cure.

Case 3.—Mary A., æt. 19, schoolmistress, applied at the Dispensary, January 11, 1864. At that time she was suffering from a severe attack of quinsy. She stated that she very often had an ulcerated sore throat, and that her voice was always very thick and indistinct. She had often been advised to have the tonsils cut out, but was afraid to submit to the operation. On the subsidence of the acute symptoms the patient consented to have the tonsils reduced by the London Paste. The remedy was applied on the 18th, 23rd,

and 29th of January, and again on the 5th and 10th of February. On the 17th of February the tonsils were reduced to a convenient size.

Case 4.—Henry W., æt. 11. This patient was sent to the Dispensary, in December, 1863, by a medical friend, who had previously attempted to reduce the enlarged gland by the application of the solid nitrate of silver. The treatment had been steadily persevered with for three months. There were certainly numerous small holes in the tonsils, but not more than I have often seen in tonsils which had not undergone any particular treatment. The right tonsil was very much enlarged and the left one slightly. The escharotic plan of treatment was commenced January 12, 1864, and was continued till the 28th, four or five applications of the paste having been made to the right gland. At the beginning of February the patient was quite well and left off attending at the Dispensary.

Case 5.—Jemima C., aged two years and ten months, was brought to the Dispensary for Diseases of the Throat, January 13, 1864, suffering from enlarged tonsils. She had much difficulty in swallowing, and her mother stated that “she was sometimes afraid that the child would be choked whilst eating.” Respiration was accompanied with stertor, and “the difficulty of breathing sometimes made her get black in the face.” On examining the throat, the tonsils were seen to be so much enlarged that they met in the centre. An attempt at extirpation had been made in one of the general hospitals, but the age of the patient had caused it to end in failure. The mother would not hear of another cutting operation. The tonsils were so extremely large in this case that I scarcely liked to use the London Paste. The passage was so small that I feared it might be completely occluded by the inflammatory action set up by the escharotic. After much hesitation, London Paste was applied, for the first time, on the 25th of January. The next day I saw the little patient, who refused to take any food at all, and complained of great pain in the throat. She could not be persuaded to let us examine the state of the fauces. It was not till February 12th that the child could be induced to allow the throat to be inspected. The enlargement of the tonsils was seen to be very slight, and not sufficient to make any further attempts at their reduction necessary.

Case 6.—Stephen C., æt. 8, brother of the last patient, was brought to the Dispensary, February 15th. Both the tonsils were much enlarged. The boy had had measles when three years old, and the tonsils had been enlarged since that time. In this case the London Paste was applied eight

times, and the patient did not leave off attending here till the end of March. He was then completely cured.

I will not weary you with the details of any further cases, for they necessarily bear a close resemblance to one another. You have seen these cases and many others, before, during, and after treatment, and you can judge of the effects of the London Paste for yourselves. I may observe, however, that in private practice I have pursued this plan in a great number of cases with the most satisfactory results. In two complicated cases of dysphonia clericorum recently under my care, the reduction of the tonsils by the London Paste permitted a rapid cure, and as neither of the gentlemen would consent to a cutting operation, I consider that in these cases the paste really effected a cure which would otherwise have been impossible. At the risk of being prolix, I have entered into numerous details concerning this new mode of treating enlarged tonsils, for though a safe and satisfactory method, if properly employed, the careless application of the paste might be attended with serious danger.

In conclusion, I must beg of you not to misunderstand me with reference to the mode of treatment now brought under your notice. You must bear in mind that sometimes when patients are placed under favourable hygienic conditions, the enlarged tonsils will slowly but progressively diminish without any special treatment. Just as there is often a tendency to the deposition of material from the blood, and its subsequent development, so sometimes the deposit has a disposition to disintegrate and to be re-absorbed. Unfortunately the first series of changes is more common in the tonsils than the second. Still you must recollect that tonsils previously enlarged occasionally, though rarely, undergo a kind of spontaneous atrophy. I need scarcely observe that cod-liver oil, quinine, mineral tonics, nourishing diet, and sea air are calculated to bring about that tonic condition of the system which favours vigorous absorbent action.

Many of you have had an opportunity of watching the results of the plan of treating hypertrophied tonsils by the application of London Paste. Some of you, I am aware, are disposed to regard it as troublesome and tedious when compared with extirpation. Still none can deny that it is highly effectual, and in those cases where, from the shape and size of the gland, it is difficult or undesirable to use the knife or the guillotine, or where—as very commonly happens—the patient objects to a cutting operation, experience has already proved that the London Paste is a most valuable agent.

On a new Remedy in the Treatment of Certain Forms of Dropsy.

By W. ABBOTTS SMITH, M.D., M.R.C.P., Lond., Physician to the Metropolitan Free Hospital, and to the Finsbury Dispensary; late Senior Physician to the City Dispensary, &c.

IN March, 1863, I brought under the notice of the Medical Society of London a remedial agent, which, in consequence of its diuretic and local tonic properties, I had found very efficacious in the treatment of certain forms of dropsy, and as I have since had opportunities of observing its medicinal value, I venture to make it the subject of a few remarks.

The remedy to which I refer is the *Erodium cicutarium*, or common stork's-bill, an indigenous plant which belongs to the natural order Geraniaceæ, and grows abundantly in sandy situations near the sea-side. My attention was first drawn to it by some observations made in the "Medical Times," by Mr. Byerley, F.L.S., of Seacombe, in Cheshire, who stated that it had been productive of great benefit in a case of dropsy which had come under his treatment.

The first case in which I prescribed the erodium was that of a man, of about forty-five years of age, who had been a patient of mine at the Metropolitan Free Hospital, for a period of two months, owing to his suffering from renal disease, complicated with anasarca, and subsequently with ascites. During the time that he had attended as an out-patient he had taken squills in small doses, digitalis, scoparium, and many of the diuretics ordinarily given, without any permanent good results. The digitalis appeared for a short time to keep the effusion in check, but it soon lost that power. I had also administered elaterium, the *pulvis jalapæ compositus* of the London pharmacopœia, and other drastic purgatives, but as they certainly weakened the patient without being productive of any adequate degree of benefit in the reduction of the dropsical effusion, their use was abandoned. At this crisis I commenced the administration of the decoction of erodium, in three ounce doses, four times a-day, and in order that I might be enabled to form an impartial opinion of this remedy, and also that I might avoid the fallacy of arriving at a *post hoc, ergo propter hoc* conclusion, I ordered the discontinuance of all previous prescriptions. Upon the patient's next visit to the Hospital I had the satisfaction of learning that the swelling of the legs had considerably diminished, and that the abdomen was smaller, as was shown by the

comparison of a measurement, made by means of a tape passed round the body, at a point about an inch below the umbilicus, with the dimensions noted upon the occasion of the patient's last visit. The flow of urine was stated to have been very copious. The medicine was continued for three weeks longer, after which time the patient was placed upon a short course of tonics. At the end of November, 1862, he was discharged cured, and since that date he has been able to follow his usual out-door avocation,—that of a cooper.

Another case in which I tried the erodium was of an equally unfavourable character. The patient, a man of about sixty years of age, had suffered from repeated attacks of ascitic effusion, consequent upon enlargement of the liver, caused by excesses in drinking spirituous liquors. The decoction of erodium was given for a fortnight, in four-ounce doses, three times daily, unaided by any other medicine than an occasional compound colocynth pill, for the purpose of keeping the bowels open. At the expiration of a fortnight the abdominal effusion had nearly disappeared, and the patient was subsequently placed upon a course of alterative and tonic medicines, with a more nutritious diet, which soon completed the cure.

In some other cases of a similar nature I have found the erodium valuable. The form in which I have generally employed this remedy is that of decoction, which is best made by placing two ounces of the dried plant in three pints of boiling water, which should be allowed to simmer until the quantity of fluid is reduced to two pints; the remaining liquid should then be poured off and strained, so as to render it fit for use. An extract has been prepared by Messrs. Clay and Abraham, of Liverpool, but my experience of that preparation is too limited to allow of my speaking decisively of its merits.

I do not, of course, advocate the substitution of erodium for all other remedies used in the treatment of dropsy, as this disease depends upon so many different causes that it would be absurd to suppose that a specific could be discovered for every form of dropsy. I believe, however, that it is often worthy of a trial, and that it will be found a serviceable adjunct to other plans of treatment, especially in the large class of cases of dropsy in which, although we may feel that diuretics would greatly facilitate the cure, we yet hesitate to resort to their use, owing to the serious complications which not unfrequently follow the administration of those commonly employed, through their excessively stimulating action upon the kidneys.

REVIEWS AND NOTICES OF BOOKS.

Lectures : Chiefly Clinical. By THOMAS KING CHAMBERS, M.D., F.R.C.P., Honorary Physician to the Prince of Wales; Physician to St. Mary's and the Lock Hospitals. Post 8vo., pp. 599. Third Edition. London: Churchill and Sons. 1864.

THE former title of this work, "The Renewal of Life," was thought by several critics to be fanciful, and the author has consequently given way to their objections, and modified the title, not however without a hit in his preface at the manner in which the words had been found "strangely open to misrepresentations by the reviewers." For our part, we must say that we prefer the original title, as being epigrammatical and expressive. Dr. Chambers' intention in his clinical lectures was to show that the chief point for consideration in disease is the deficiency of vital action, and that, to ensure success, all treatment must be directed towards bringing about a renewal of that vital action.

The present volume contains numerous new lectures, delivered either at the College of Physicians, or at St. Mary's Hospital.

In the introductory lectures, "Death and Life," and "Disease and Cure," the author points out his views, which he more fully illustrates in subsequent chapters. Speaking of the ever-varying nature of the animal body, which he likens to a building constructed of perishable materials, which need continuous renewal to maintain its usefulness, while decaying materials require constant removal, he says:—

"Thus there are two departments carried on simultaneously—the 'destructive' and the 'constructive;' and upon their harmony and completeness depends the perfection of life which we call health. Both are necessary; and the deficiency of either or both, or the preponderance of one over the other in various parts, or the deficiency in one part while other parts remain active, constitutes a deficiency of life—a disease." P. 16.

This definition gives us a clear view of Dr. Chambers' theory of health and disease, the latter of which, *i.e.*, the deficiency of vital action, is what the physician is called upon to remedy, and with this idea prominent in his mind, he should look steadily forward to the renewal of lost power, and the increase of deficient power. Following this line of reasoning, the author suggests the division of morbid phenomena into—1, Deficiencies of nutrition; and 2, Deficiencies

of form, *i. e.*, destruction. If we admit the existence of these two parts the "constructive" and the "destructive" in the chain of life, a primary four-fold classification of curative agents arises. These Dr. Chambers enumerates as: 1. Constructives, or aids to formative nutrition; 2. Destructives, or augmenters of destructive assimilation; 3. Arresters of Construction; 4. Arresters of Destruction. Amongst Constructives, he includes the following:—The materials of which the body is built up, such as albumen, fibrine, &c., which are generally taken in the form of food; medicines which appear to act by replacing necessary constituents of the body, such as quina, for example, whose cure of ague may be explained by supposing it to replace some constituent of the body, destroyed by malaria; digestive solvents, such as water, lactic acid, and bile; excitants of digestive solvents, such as mineral acids, and alkalies; artificial replacement of deficient vital functions, *e.g.*, artificial heat and electricity; temporary revival of deficient functions, as is effected by warm bathing, and stimulants; increasers of absorption, such as vegetable bitters and astringents; and excitants of the involuntary muscles which subserve absorption, *e.g.*, strychnia and aloes.

With Destructives our forefathers have left us well acquainted, as the author observes, and the terms sudorifics, purgatives, &c., are in common as well as professional use. The uses of agents belonging to this class are to remove from the system effete matters which are toxically noxious to healthy life; to remove mechanical impediments to normal excretion; to get rid of impediments to absorption; and to remove systemic poisons which are the cause of disease.

Arresters of constructive life, as such, can scarcely come under the heading of medicines. Alcohol might, under certain circumstances, be classified with such agents, as when it is occasionally given to young animals (as it sometimes is to indulge a barbarous whim) in order to check their growth, and keep them small; but the same article also figures in a different light, *viz.*, as an arrester of vital decay.

We have dwelt at some length upon the views expressed in the two introductory chapters, as they afford a complete key to the author's pathological and therapeutical theories.

The three next chapters formed the course of Lumleian Lectures, delivered by Dr. Chambers at the College of Physicians, in 1863, for which he selected the subject of "Mucus and Pus." As they have recently appeared *in extenso* in one journal, and in abstract in others we need not occupy time with them, but we may observe that they afford numerous illustrations of the author's forcible and clear style of expres-

sion. He especially points out that the term by which the mucous membrane is designated is fallacious. The office of this membrane is *not* to secrete mucus; and he shows that it is most active when it is not doing so, and its activity is decreased in proportion to the copiousness of the mucus. The question may be asked, what then is the office of mucous membrane?

"The business of mucous membrane is to offer a passage for oxygen, water, fat, albumen, and other nutritimentary substances, and to defend the less easily renewed tissues beneath it from the deleterious action of external agents. These functions it best fulfils when it is bedewed with a moderate watery exhalation, and not with mucus."

Lecture 6 commences the subject of fevers, and although the author agrees that, pathologically speaking, a distinction is to be made between typhus and typhoid fever, he considers that in speaking of treatment it is sufficient to make use of some term which includes both fevers, and does not involve adhesion to any theory of identity or difference. He has accordingly coined the word "Typh-Fever," by taking the first four letters in the words "typhus," and "typhoid," and he uses it indifferently when speaking of the two varieties of fever. However convenient he may find this term, common to the two fevers, in lecturing, we must think that it has its disadvantages. If nicety and refinement of nomenclature be desirable in the description of pathological phenomena, they must be equally requisite in the account of treatment, particularly when students constitute the audience. Just at the present time, the question of the diversity of typhus and typhoid fever is one of the knotty points of medicine, and Dr. Chambers' mode of cutting the Gordian knot by the introduction of such a term as that which he makes use of is, upon the whole, to be regretted.

The author inclines to the opinion that the most usual path by which the virus of fever, when produced by decomposing organic matters foreign to the body, enters, is the digestive canal, and that it probably mixes with the saliva, and is carried down to the stomach. In support of this view it is observed that those who smoke, or chew, especially if they spit out the saliva instead of swallowing it, are less liable to suffer during an epidemic than other persons, and, as has been pointed out by Catlin, whom the author quotes, the Indians of North America escape the injurious effects of malarious emanations, in consequence of a habit which they have of keeping the mouth firmly closed, excepting when speaking or taking food.* At an early stage, too, the fever

* On this point we may refer the reader to the notice of Catlin's "Breath of Life," contained in our last number.

may be stayed by emptying the stomach by the administration of an efficient emetic. In the treatment of low continued fever, Dr. Chambers depends mainly on hydrochloric acid, given internally, and in judicious efforts to increase the appetite and strengthen the digestive powers, so that the patient can take an additional quantity of nutriment. With respect to the use of alcohol, we must, as he very properly observes, be guided almost entirely by the condition of the nervous system; if there be complete prostration and delirium of a low muttering kind, it is required, and a tremulous state of the muscles, and sharp, weak, unequal beat of the heart are further indications of the desirability of its administration.

The author's therapeutical statistics of fever are interesting and instructive. Out of 230 cases, 109 were treated on general principles, viz., by the administration of neutral salines three or four times a-day, with small doses of hydrargyrum cum cretâ once or twice a-day at first, and later in the course of the disease, bark, ammonia, ether, and wine, when they seemed to be indicated by the symptoms. Leeching and cupping were resorted to when any viscera were inflamed; and food was administered at the ordinary four daily meal-times. The other 121 cases were treated on an uniform plan of continuous nutrition. Animal food, in a liquid form, either strong beef-tea or milk, was given every two hours, day and night, when the patient was awake, and between every two doses of nutriment a dose of hydrochloric acid was administered. The surface of the body was sponged two or three times daily with tepid water, when the skin was hot and dry, and in a few instances leeches or cupping were used to the exterior of inflamed localities in the abdomen or chest. The rate of mortality under the general treatment was nearly one in five; under the second method described it was scarcely one in forty. Dr. Chambers gives a good practical hint about the situation of the eruption in typhus and typhoid fever, and cautions the observer against confining his inspection solely to the surface of the chest or abdomen, as is very commonly done; the sides and buttocks sometimes present well-marked spots, when the eruption is doubtful elsewhere. He also earnestly insists upon the great danger incurred in removing fever-patients to a distance, as they frequently die of exhaustion induced by the fatigue of a journey.

In the treatment of rheumatic fever the author orders the patient to be wrapped in flannel, which, if the limbs are painful, may be previously soaked in hot water, or decoction of poppies, with half an ounce of carbonate of soda to each pint of fluid. If there be redness, swelling, and pain about

the joints, and infiltration and sensitiveness of the cellular tissue around the muscles, so that motion is painful, the alkaline treatment, a scruple of bicarbonate of potash in camphor water every other hour, when the patient is awake, should be adopted; but if the symptoms just referred to are insignificant, and the pain is felt more in the bones, and does not change its seat, two grains of iodide of potassium may be added to each dose of medicine, or the alkali may be omitted altogether, and iodide of potassium be alone given. Opium may be administered in proportion to the degree of pain; and if the pain remain fixed in one joint, leeches or poultices may be used. The latter external remedies may also be employed at the cardiac region if the heart become inflamed, a poultice being always applied when leeches have been used. If the patient's diet has been previously high, it will bear reduction to gruel and tea; but if he has been badly nourished, a pint of beef-tea or broth may be added. The author's therapeutical statistics in reference to rheumatic fever are worthy of notice. The mean stay in hospital of 26 patients treated chiefly with nitre was 40 days; that of 141 treated with scruple doses of bicarbonate of potash every two hours was 34.3 days; and the mean time of cure of 33 patients who were treated with less quantities of the alkali was 40 days. Very few of the patients treated with bicarbonate of potash were attacked by inflammation of the heart as compared with the average of those who were subjected to treatment by the nitrate of potash, while none of the former died.

This immunity seems, however, to have been in great measure due to careful blanketing, the patients being completely enveloped in blankets. Dr. Chambers shows that this plan of wrapping the patients in blankets reduces the risk of inflammation of the heart from 16 to 4, *i.e.*, by three-fourths.

One of the most recent lectures is that upon capillary (or suffocative) catarrh. In this affection much benefit is derivable from internal moist warmth, by the inhalation of the vapour of hot water, and from external moist warmth, by the application of a large "jacket" poultice of linseed meal. The action on animal tissues of warmth and moisture combined is to directly increase their vitality. A large poultice to the trunk of the body is also valuable in the treatment of pneumonia. Dr. Chambers holds with the advisability of occasional bleeding in this disorder. This seems somewhat opposed to his theory of the necessity of adding to the vital power in disease; but he explains that the good done by the bleeding in this affection is mechanical, and he also advises

care in supplying, by diet, material in the place of that which is taken away, recommending beef-tea or milk to be given frequently. He considers that the best guide to the necessity for bleeding is the dyspnœa; if the patient is breathing laboriously from twenty to thirty times a minute, and convulsively straining the muscles of inspiration, it is evident that the congestion is recent, and is spreading to new spots. Change of position is of great importance in the pneumonia of low fever, and it is desirable to change the patient over, so that he may lay on the unaffected side, as in that manner we can take advantage of the assistance of gravitation in unloading the engorged lung.

The author speaks very highly of the action of the iodide and bromide of potassium in epilepsy, and in meningitis.

He adduces evidence from practice and experiments to prove that alcohol is primarily and essentially a lessener of the power of the nervous system, an anæsthetic, in point of fact, and that when more alcohol is taken than the healthy instinct prompts, vital metamorphosis is diminished. The rules which he lays down for the administration of alcohol appear to us so consistent with the results which we have observed in practice that we have no hesitation in transcribing them:—

“1. Give alcohol whenever you find the nervous system is exhausting itself and the body by an activity in excess of the other bodily functions.” (In fever attended by delirium, for example.)

“2. Give it, increase it, leave it off under the guidance of the appetite for food. As long as a sick person takes and digests food better with alcohol than without, so long it is doing good. Beyond that we have no evidence.”

“3. When the marked feature of the disease consists in retention of effete matters which ought to be discharged, abstain from the use of alcohol altogether.” (*e.g.*, in uræmia and jaundice.)

“4. Divide the daily allowance into two or three doses only, giving enough at once to produce a decided effect. The action of frequent small divided drams is to produce the greatest amount of harm of which the alcohol is capable, combined with the least amount of good.” (In fever, for instance, patients do best with the daily quantity ordered, divided into three, or even only two, doses.)

We had marked numerous other passages in this work, but our limited space will not permit of our quoting them. We trust, however, that our readers will judge of the book for themselves, and we can promise them a large amount of interest and information from its perusal. It bears throughout so evident a stamp of deep thought and earnest practical observation, and the numerous clinical deductions which are given are so clearly and fully worked out, that it must prove valuable alike to the student and to the practitioner.

Lunacy and Law; with Hints on the Treatment of Idiots. By T. E. D. BYRNE, L.R.C.P. London: H. K. Lewis. 1864.

ALTHOUGH the richly-deserved sentence, recently passed on the brother of the unfortunate Robert Porter, whose case excited so remarkable a sensation a few months since, may be considered as the last link in a chain of circumstances of great public interest, it is earnestly to be hoped that the exposures, which followed upon that case, of the disgraceful and cruel manner in which idiots are sometimes treated by their relatives, will not be forgotten until some efficient legislative protection shall be obtained for this unhappy class of persons.

Dr. Byrne's little work appears at a very opportune period, and we hope that its perusal may induce many to devote their best efforts towards procuring the amelioration of the condition of the poor idiot. It is difficult to imagine, at the present period, when both public and private asylums abound throughout the country, that such cases as those narrated by the author could exist; but when we add that in the limited area of fifteen miles, no fewer than five cases of idiots or lunatics kept in a state of misery and squalor, and almost destitute of the commonest articles of food, were brought under his notice, it will be evident that numerous instances must exist elsewhere, which call for immediate and energetic interference.

The case of Robert Porter, as being the first which came under the author's observation, and one which awakened much commiseration, is narrated at length. The circumstance may yet be fresh in the minds of some of our readers, but we may as well refer to some of the leading points. Dr. Byrne, having heard frequent rumours of an idiot who was confined by his brother in a most inhuman manner, communicated the particulars which he had gathered to the Commissioners in Lunacy, and in company with two of them, Messrs. Lutwidge and Wilkes, went on December 3rd, 1863, to the place where the person was confined. The state of the poor lunatic completely beggars description, and even with the assistance of the photo-lithographic illustration of the condition in which he was found, it is impossible to adequately realize the horrors of the case. In a miserable little room, possessing no means of ventilation or warming, and shut out from communication with the remainder of the house, by having the door-way plastered up, so that the only means of entrance was by a door from the garden, the visitors found a

human being, huddled on a few boards, quite naked, being covered only by a piece of wet and dirty sacking, and surrounded by such an accumulation of filth as they had never before witnessed, not even in a pig-sty. The man appeared quite docile; his body was much emaciated, and his countenance bore an aspect of extreme pallor. On examining his head, the scalp was found to be covered with old wounds; the legs were drawn close up to the abdomen and chest, and the hip and knee joints were quite stiff from the position in which the man had so long laid. The spine was curved backwards, and the body bore all over it scars of old bruises and unhealed ulcers, the latter resulting from neglect. The unfortunate man was removed to the County Lunatic Asylum, at Bodmin. Here he soon gained in health and strength, and when Dr. Byrne saw him in March, he was able to converse in a sufficiently rational manner to show that he recollected the circumstance in which he was brought to the asylum; he further stated that he was comfortable, and expressed great emotion at the mention of the name of the place, Flushing, where he had been so cruelly treated. When told by one of the attendants that it was bed time, he got off his seat, went as quickly as his crippled state would permit to his room, and undressed himself in the presence of Dr. Byrne; yet, only a short time before, he had been reported, by persons who wished to conceal the state in which he was kept, to be a violent and dangerous lunatic.

The publicity given to the circumstances connected with Robert Porter's case led to the exposure of similar instances of cruelty. These are detailed in Dr. Byrne's book, which is worthy of perusal, both on account of the philanthropic spirit in which it is written, and the suggestions which he makes for the improvement of the condition of those who are unhappily bereft of reason.

A Year-Book of Medicine, Surgery, &c., for 1863. New Sydenham Society. 1864.

As this work is of the nature of a compilation, giving, as it does, an epitome of all that has appeared in the British and Continental medical periodicals during the year 1863, it does not require any lengthened notice at our hands; but we feel that we should be doing an injustice to the five able editors if we omitted a brief reference to the excellent manner in which they have accomplished their task, and produced a Year-book which is certainly not inferior to the corresponding

volumes of previous years. Mr. Hinton has contributed the report on physiology; that on practical medicine and pathology is by Dr. Handfield Jones; Mr. Windsor has undertaken the report on surgery; the department of Midwifery and the diseases of women and children has been entrusted to Dr. J. M. Bright; and the various articles relating to toxicology, materia medica, and forensic medicine have been reduced to abstract by Dr. Fagge. The most exhaustive report is that on surgery, which occupies a third of the whole book; but a careful examination of the index serves to show that few articles of professional interest published during 1863 have escaped the vigilance of the editors of the other departments of medical science. The report on physiology forms some exception to this, and the reader must feel disappointment at finding that a physiologist like Mr. Hinton should have considered thirty-two pages sufficient to devote to the very interesting section, Physiology, which he now edits, for the first time. We hope that he will favour us with a more extended report in the next volume. A rumour has reached us that the discontinuance of the Sydenham Society's Year-books has been suggested by some of the members. If this suggestion were adopted, which, however, we think improbable, it would be a matter of regret; for, of all the volumes issued by this important society, there are none of more general interest, or more lasting value, than the annual retrospects.

1. *Corpulence: its Diminution and Cure, without Injury to Health.*
2. *Notes of Fifteen Cases of Disease Dependent on Corpulence, with Result of Treatment.* By JOHN HARVEY, M.D. London: John Smith and Co. 1864.

AMONGST the fashionable diseases of the day corpulence holds a prominent position; and if we were to add that more than half of the individuals who have submitted themselves to a process of *Bantingism*, as the dietetic treatment for obesity has been named, either had no real necessity for doing so, or have derived harm from their foolishly jumping at the conclusion that they were the victims of fat (not fate), we should not be far wrong in our calculation.

A gentleman who has undoubtedly been a sufferer from corpulence for many years, has suddenly the good fortune to meet with a means of remedying the evil by attention to a certain form of diet—the main feature in which is the exclusion from the dietary of butter, milk, potatoes, beer, pastry,

and bread, all of which contain starch, and fat-producing elements in large quantities. Finding that he gradually resumes his original healthy proportions of size under this regimen, he does what, perhaps, is a natural thing under the circumstances, viz., makes known to the public, through the medium of the press, the means to which he owes his return to health and comfort. Thereupon, a panic seizes a large section of the community, many of whom commit the error of looking upon the treatment by diet as entirely novel, while others make the more serious mistake of regarding fat as being altogether a superfluous constituent of the human body.

As regards the supposed novelty of the thing, fat persons were recommended many hundreds of years ago to abstain from milk and all sweet articles of diet,—in other words, to avoid hydro-carbonaceous food, and to live chiefly on nitrogenous food. This theory is very good, but when reduced to practice cannot fail to be injurious in those cases where people make up their minds, right or wrong, that fat is superfluous, and that it must be got rid of. Fat, like every other constituent of the human body, has its special offices to perform, viz., the nutrition of the adipose and nervous tissues, the maintenance of animal heat, and the assimilation of certain constituents (the albuminous) of the food. Consequently, those who part with their fat unnecessarily, and simply because it is the fashion to do so, must expect to suffer, sooner or latter, from their folly.

Dr. Harvey has added but little to our previous stock of knowledge upon the subject of corpulency, and he seems to have submitted his book to a process of thinning, corresponding to that which obese patients undergo. At the same time, it is worth reading by those who wish to make themselves acquainted with the dietetic treatment of obesity.

It must not be supposed that patients who are submitted to it are starved; on the contrary, the number and variety of articles which are tolerated are sufficient to bring water into the mouth of a glutton, or into the eyes of a hungry man. It wants some three hours to our dinner-time, and we must therefore beg to be excused the appetising task of copying a bill of fare in which turbot, salmon, carp, any kind of poultry or game, Madeira, sherry, and claret occupy a prominent position.

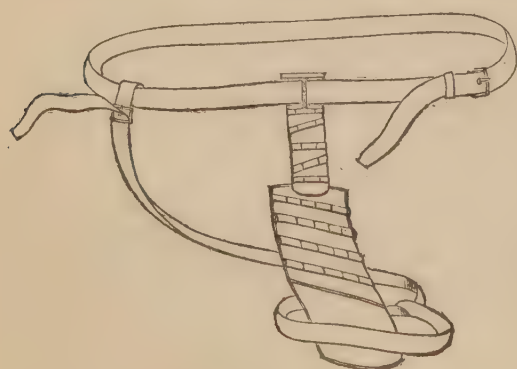
On Life and Health Assurance for the Working Classes. By W. HARDWICKE, M.D. London: R. Hardwicke. 1864.

THE author of this pamphlet has set himself to work to show in what manner the Government can best produce a satisfactory system of life assurance for the working classes. The uncertainty of continued self-support amongst those members of society who have to depend solely on wages for their means of subsistence is evident, and Dr. Hardwicke demonstrates that the only way in which they can secure the certainty of avoiding eleemosynary aid at some period of their lives, is by a plan of life assurance and deferred annuities, in connection with which health assurance may easily be added. He further expresses his opinion that, although Mr. Gladstone's bill is of itself acceptable as a step in the right direction, the scheme is capable of judicious development, and that the condition of friendly societies would be much improved by bringing them under more perfect Government supervision. The author has evidently paid great attention to the subject on which he writes, and his pamphlet is altogether one which will repay the trouble of perusal.

NEW INVENTIONS.

DR ARTHUR'S HERNIA SPLINT.

THE instrument which the accompanying engraving represents, is the splint for the cure and relief of hernia, in-



vented by Dr. Arthur, of Chelsea. Though the instrument is extremely simple in its construction, being merely a hinge chain, which can be folded up and put in the pocket, yet it effects the object it is intended for in the most admirable manner. It is fastened by a strap round the waist, and by another

strap to the thigh, which is buckled to a moveable buckle attached to the waist-belt. This instrument, while it admits of the most perfect power of motion in every position of the

body, keeps up the most uniform pressure on the hernia and abdomen, in all the various motions the body and limbs are capable of.

The inventor says the pain and misery caused by wearing the spring truss is never occasioned by this instrument, which is scarcely felt by the wearer. In fact, as it diffuses its support from below upwards, it is rather pleasant to wear than otherwise. The circocoele, varicose veins, pain in the hypogastrium, pain in the sacrum and loins, itchiness and inflammation of the skin, together with the constipation occasioned by continuous pressure on the bowels, which render life scarcely endurable under the spring truss, are never occasioned by this instrument, which can be worn in bed with perfect comfort, and which will render a discharge from the public services unnecessary. Most cases of recent hernia in healthy adults can be cured by using the instrument for a few months, and remitting a portion of the patients' most laborious duties.

THE MONTH.

AN ADDRESS TO INTENDING MEDICAL STUDENTS.

As it is usual, in connection with the issue of a Students' number, to make a few special remarks, we shall follow this time-honoured custom.

Supposing that the intending student has made his choice of the medical profession as his future calling, the next point for consideration is the choice of a school at which he shall prosecute his studies. In this matter, unless overcome by *embarras de richesses* at seeing the advantages so profusely offered to him by the different institutions included in our list, he must derive material assistance from a perusal of the special information which we convey. If he should have a relative in the medical profession, he will probably have consulted him; if he have not done so, he ought forthwith to seek his advice upon this very important matter. Or, if he have no medical relative, he may ask the opinion of the usual professional attendant of his family.

And here we would especially caution intending students against one common source of fallacy in the selection of a medical school, viz., the size of the hospital with which it is connected.

If, by some arithmetical process, the mental capacity of

the student could be multiplied by the number of patients contained in any given institution, then it would, of course, be most desirable that he should study at the largest hospital which he can find. But such is not the fact, and it is of more importance to a student to master fully the details of one case of disease than to see in a superficial manner twenty patients. Consequently, the great *desideratum* in the selection of a medical school is clinical teaching, and although *cæteris paribus* a large hospital affords a greater field for instruction than a small one, that hospital is the best for the student, whether the annual number of its patients be reckoned by hundreds or thousands, in which clinical teaching is most cultivated.

Within a few weeks from the time of our writing, the student will find himself entered at the school of his choice, and commencing a career upon which his future happiness and success must, in great measure, depend. He will also find himself, perhaps for the first time in his life, in a large city, surrounded by numerous temptations, and unfettered by any restrictions. This is, in truth, the touch-stone of his character, the turning-point of his history. If, as we trust that he will do, he determines to set heartily to work at his studies, and to commence diligently his attendance upon lectures and hospital practice, he will soon derive real present satisfaction, while he may also look for lasting benefit, from the performance of his duty.

But if, on the other hand he neglects the advice of the parents and friends who he has recently left (some of whom have, perhaps, only at a great sacrifice to themselves, been able to furnish the means for his future studies, while all are lovingly anxious for his welfare), and allows himself to be led away by the pursuit of pleasure, he will sooner or later reap disappointment and disgrace. He may probably urge in his own mind, that a little delay, say of only a month or a week, so that he can see something of the amusements which surround him on every side, before commencing his studies, can do no harm, as he has years in which he can easily make up for lost time. Let him at once divest his mind of this delusive argument. We would say in reply to it, "Not a month's, not a week's, not a day's delay in beginning his studies." If it be difficult to make an immediate commencement, no postponement can be of service, and if once he becomes a votary of pleasure, it will be no easy matter to shake off her influence. While he is giving himself up to amusement, other students of his own standing will be getting onwards with their studies, and when he makes a fair start he will have the chagrin of finding himself placed at a disadvantage.

as compared with those who have already mastered the rudiments of professional knowledge. Amongst the earliest reminiscences of his school-boy days, he will recollect the oft-set copy "Delay is dangerous;" let him take this motto to heart, and act upon it.

He will recollect, too, the fable of the hare and the tortoise; how the swiftness of the former animal availed little against the steady plodding pace of the tortoise, owing to the hare's negligence in making the best of its superior pace. And, as it is in the fable, so also will it be found in the race of life; it is the man, strong in resolve, and earnest in the execution of his purpose, who reaches the goal, and achieves success, and not he who at one time moves onwards with rapid impulse, at another stands still.

The student must not imagine that we advocate a system of continuous work and no recreation. Far from this is our wish. Recreation is necessary for all, and a healthy mind cannot exist in a sickly body; but what we wish chiefly to impress upon the student's mind is, that there is a time for work and a time for taking holiday, and that the latter, however, great its attractions may be, ought never to be permitted to interfere with the former. Further than this, our object is to warn him against the consequences of too readily yielding to the inducements which abound in large cities to pursue certain so-called pleasures which, in the long run, cannot fail to be prejudicial to their votaries, pleasures which constitute the Juggernaut of our social system, and bring misery and ruin in their train.

Habits of early rising, and of out-door exercise, are not incompatible with application to study. The gymnasium in winter, the cricket-field, a good pull on the river, or a ride or walk into the fresh wholesome country, in the long summer evenings, or on Saturday half-holidays, will do no one harm, but, on the contrary, benefit. The man who first introduced the high-pressure plan of getting a *maximum* of work out of a human being with only a *minimum* of recreation is deserving of universal execration, and showed an utter ignorance of the noblest work of Nature, in attempting to reduce man to the dull monotonous level of a machine.

The student, upon commencing his course of instruction, will probably feel no little discouragement in seeing about him things which are wholly strange to him, and which are even described in terms which he is at a loss to understand. But this difficulty will soon grow less, and as he proceeds with his studies the student will derive much gratification from the mastery which he is gradually gaining over obstacles which at first sight appeared almost insuperable. He ought

never to lose an opportunity for gaining information upon everything which, however apparently insignificant, may serve to increase his stock of professional knowledge. He should recollect that, when the time arrives for him to commence practice, he may be thrown by circumstances into a position where he cannot seek for the aid of a second person, or that if he should be able to do so, he may possibly bring ridicule upon himself by his ignorance of common things. We have not unfrequently seen men who had taken the highest diplomas, and who were perfect cyclopædias of medical theory, hopelessly puzzled by an ordinary case of disease. Much of the blame in this respect rests with the modern system of lecturing. Too much stress is laid upon rare affections, which, however interesting when they do happen, occur so seldom that a man may spend a life-time in practice without meeting with two cases; and, again, some lecturers seem to forget that lecturing and teaching ought to be synonymous terms, and bring such abstruse subjects before their auditory that, at the end of a week's hard lecturing, the student's mind may be crammed full of crude matter, but yet be destitute of a single well-digested fact. The real remedy for this drawback in modern medical education would be the appointment in every school of a tutor, whose duty it should be to examine the students at stated intervals upon the subjects of study, and to explain any points which they cannot clearly understand. Such an official exists in some of the medical schools, and we hope that the time is not distant when all will be equally well provided in this respect. The student should constantly cultivate a habit of observation, and never sit down calmly to an acknowledgment of incapacity to understand, either what he has read, or what his lecturers have told him.

While he is thus advancing in his professional studies, the student should not neglect to improve his general knowledge, and he should particularly keep up his acquaintance with those branches of education on which his preliminary examination was conducted. The public are not, of course, competent to judge of a practitioner's medical attainments, so that it is necessary for him to show that he has both the education and manners of a gentleman, in order to ensure their esteem and respect.

In the introductory lectures which students will shortly hear, the medical profession will be placed in two distinct lights, according to the peculiar way which the lecturer may have of looking at things. At one school, Felicitans will display the bright side of the picture, will discourse upon the future of the student in brilliant terms, will talk of

the almost divine calling of the physician, quoting Cicero's well-known sentence, "*Nullá re proprius Dís accedunt homines, quám hominibus salutem dando,*" and will so praise up the medical calling that he will almost persuade his audience to the belief that it is only necessary to be a doctor to obtain everything worth having, both in this world and the next. At another school, Miserrimus will make his junior auditors very uncomfortable, by dwelling on the dark side of the picture, and by gloomily telling his hearers that the practice of the profession entails many hardships, that its members are badly paid, and insufficiently recognised by the State, and that they must look for their reward in the consciousness of having done and deserved well, rather than in wealth or position. To a certain extent, both lecturers will be right: both wrong. The senior auditors of Felicitanus will, in the midst of his brilliant perorations, call to mind a time when he must have been puzzled as to the source of his next guinea; while Miserrimus, as he rolls away in his well-appointed carriage, will scarcely bear out in appearance the picture which he has drawn for the benefit of those who are just entering the profession.

It is as absurd to conjure up imaginary difficulties as it is to pretend that any calling can be without its trials and disappointments. Far better would it be to tell the student the simple truth: that he must work, if he would win success; and that if he devotes himself fairly to the acquisition of knowledge, and goes forth on his new career determined to do his best and his duty, and satisfied to progress by dint of perseverance and patience, he must ultimately succeed in gaining for himself a competency and an honourable position, coupled with the esteem of all around him, and an honest conviction that he is a useful member of society.

MEDICAL INTELLIGENCE.

THE BRITISH MEDICAL ASSOCIATION.—The thirty-second annual meeting of the Association was held at Cambridge on the 3rd, 4th, and 5th of August, and was one of the most successful meetings which has yet been held. The attendance of members was large, being over 200, and, although many of those present were from the neighbourhood of Cambridge, there was a considerable influx of visitors from a distance, attracted by the special inducements connected with the University. The address of the new President, Dr. Paget, was of a most eloquent character, and the addresses in medicine and surgery, delivered respectively by Dr. Ormerod and Dr. Humphry, fully sustained the reputation

of those gentlemen for practical knowledge and scientific attainments. Papers were read by various members of the Association, including Drs. Routh, Sansom, Martyn, Radcliffe, Budd, Dick, and Richardson, and Messrs. Spencer Wells, and Bridget. The topics of a Medical Provident Fund (in connection with a report from the Committee on this subject, presented by Dr. Richardson), of the Army Medical Service, and of the desirability of changing the present manner of voting at elections of Councillors at the Royal College of Surgeons, were discussed at different meetings. *Conversazioni* were held at Caius and Downing Colleges, and a numerous dinner, in the magnificent hall of the former college, terminated a successful meeting. The number of members now exceeds 2,400. It is to be regretted that the balance-sheet of the Association is not more satisfactory. The gross receipts for 1863 amounted to £2,976 17s. 2½d., while the disbursements amounted to £2,985 0s. 3d.; the Association has consequently a balance on the wrong side of £8 3s. 0½d., and this would have appeared still worse but for a donation of £10 10s. from Dr. Evans, of Gloucester. This unfortunate state of things appears, however, to be wholly due to the great expenses on account of the *Journal*, which absorbed a sum of £2,728 14s. 4d. from the exchequer, leaving only the modest sum of £256 5s. 11d. to meet all the other expenses of the Association. Many of the members wish to return to the old system of publishing transactions, instead of the Association being burthened by the weekly *Journal* to such an extent that there are no available funds for charity, the encouragement of medical science, and other purposes contemplated by the founders of the Association.

ROYAL MEDICAL COLLEGE, EPSOM.—The Right Hon. Earl Granville, K.G., Chancellor of the University of London, has accepted the office of President of the Medical College at Epsom.

PASS-LISTS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—FELLOWSHIP.—The following Members, having been previously elected Fellows of the College, were admitted as such on August 8th:—Field, Octavius Adolphus, Sussex-gardens, Hyde-park; Geo. Gerald, Royal Navy.

LICENCE IN DENTAL SURGERY.—The following gentlemen, having passed the necessary examination, received their diplomas in Dental Surgery on August 1st:—Clarke, John Clough, Nottingham; Hele, Warwick, Cheltenham; Reboul, Anthony Percy, Albert-street, Islington; Virgin, Henry James, Oxford.

APOTHECARIES' HALL.—The following gentlemen were admitted to the

Licence on August 4th :—Brewer, A. H., Victoria, Monmouthshire ; Coats, G. A. A., Sirhowy, Monmouthshire ; Gornall, J. H., Royal Infirmary, Liverpool ; Green, T. W., Glasgow ; Hill, A., Cumberland-street, Pimlico ; Hudson, E. A., St. Mary's Hospital ; Hughes, R., Llanddenioler, Carnarvon ; Knott, Wm. P., Blisworth ; Langhorn, J., Brompton-road ; Lawton, F., Chiddingfold, Surrey ; Lower, N. H., Lewes, Sussex ; Ray, E. R., Dulwich ; Wallis, A. J., Cambridge ; White, C., Guy's Hospital ; Williams, J., Anglesea. On the same day the following gentlemen passed their first examination :—Brigstocke, C. A., St. Bartholomew's ; Fowler, G., Lucas, H., and Trimmell, E. A., of Guy's Hospital.—On August 11th, the following Licentiates were admitted :—Snook, J. W., St. Bartholomew's ; Barrett, J. W., Eton, Bucks ; Lowndes, J. M., New Kent-road. On the same day the following passed their first examination :—Dunn, J. R., Middlesex Hospital ; Marshall, F., King's College. On August 18th, the following Licentiates were admitted :—Cropp, F. J., Park-road, Clapham ; Green, T. H., Saffron Walden ; Lightbody, J., Kirby Moorside, Yorkshire ; Spooner, E. M., Blandford, Dorset ; Taylor, F. H. W., College-green, Camberwell. The following gentleman passed his first examination on the same day :—Butler, W. H., Guy's Hospital. The following gentlemen were admitted as Licentiates on August 25th :—Colborne, A. C., Tachbrook-street, S.W. ; Johnson, J., Hogsthorpe, Lincolnshire ; Taylor, S. T., Argyle-square, St. Pancras ; Turner, E., Hampstead, Middlesex. As an Assistant :—Mildren, W. W., Hayle, Cornwall.

MEDICAL VACANCIES.

MANCHESTER ROYAL INFIRMARY.—For a Junior House-Surgeon. Candidates must have the College and Hall diplomas. Salary, £63, with board and lodging. Application to be sent to the Secretary before September 3rd. -

BIRMINGHAM LYING-IN HOSPITAL.—For a Resident Surgeon. Particulars of the Secretary at the Hospital, Broad-street, Birmingham.

PRESTON DISPENSARY.—For a Junior House-Surgeon, who must possess qualifications to practise Medicine and Surgery. Salary, £80, with furnished apartments, firing, and attendance. An early prospect of advancement may be expected. Applications to be forwarded to the Treasurer, before September 8th.

HOSPITAL FOR CONSUMPTION, BROMPTON.—For a Resident Clinical Assistant. Applications to be sent in before September 3rd. Further particulars may be obtained at the Hospital.

CHELTENHAM GENERAL HOSPITAL.—For a Dispenser and Assistant House-Surgeon. Salary, £50, with board, in the Hospital. Applications to be sent to the Resident Surgeon.

CLAPHAM GENERAL DISPENSARY.—For a Resident Dispenser. Salary, £70. Particulars as to the duties can be obtained at the Institution, Manor-street, Clapham. The election will take place on September 23rd.

APPOINTMENTS.

ATKINSON, F. H., Esq.—Medical officer for the Benington District of the Boston Union, Lincolnshire,

BARWIS, T. L. B., Esq.—Medical Officer for the No. 1 District, Melton Mowbray Union.

BATEMAN, F., M.D.—Physician to the Norfolk and Norwich Hospital.

BRIGHT, J. A., Esq.—House-Surgeon to the Tunbridge Wells Infirmary.

BRODIE, G., M.D.—Physician-Accoucheur to the St. George's and St. James's Dispensary, King-street, W.

- CAMERON, A., M.D.—House-Surgeon to the Northern Infirmary, Inverness.
- COLAHAN, P. J., Esq.—Medical Officer for the Killaan Dispensary District of the Ballinasloe Union.
- COOMBS, W. G., M.D.—Assistant Medical Officer to the Dorset County Lunatic Asylum.
- CURRIE, T., Esq.—Apothecary to the County and City of Perth Infirmary.
- DAVIDSON, F. M. D., Esq.—Medical Officer to the No. 4 District of the West Ham Union, Essex.
- DAVIES, J., Esq.—Assistant House-Surgeon to the Stockport Infirmary.
- DOBIE, W., Esq.—Medical Officer to the Kirkby-Thore District of the East Ward Union, Westmorland.
- ELLIS, E., M.D.—Assistant-Physician to the North London Consumption Hospital.
- EVANS, T., Esq.—Certifying Factory Surgeon for the District of Pembryn, Wales.
- FAIRBANK, F. R., Esq.—Surgeon to the Chorlton Dispensary, Lancashire.
- FOOTE, G., Esq.—Medical Officer to the Pembridge District of the Kington Union, Herefordshire.
- FOSTER, B. W., Esq.—Professor of Anatomy at Queen's College, Birmingham.
- HARRIS, J. S., Esq.—Medical Officer to the Workhouse and No. 1 District of the Blything Union, Suffolk.
- HARRIS, S., Esq.—Honorary-Surgeon to the Loughborough Dispensary.
- HARRISON, R., Esq.—Medical Officer to the Ambleside District of the Kendal Union.
- HAWTHORN, J., Esq.—Medical Officer for No. 4 District of the Newcastle-on-Tyne Union.
- IDESON, J. J., Esq.—Medical Officer for the Colne District of the Burnley Union.
- ISTANCE, R., Esq.—Medical Officer to the Coveril District of the Carmarthen Union.
- KNOWLES, H., Esq.—Resident Surgeon to the Lying-in Hospital, Birmingham.
- LEWIS, W. T., Esq.—Medical Officer to the Loughton District of the Epping Union.
- LINEKER, E. H., Esq.—Medical Officer to No. 2 District of the Ongar Union, Essex.
- LISTER, C. E., M.D.—Medical Officer to the Toxteth Workhouse Infirmary, Liverpool.
- M'GOWAN, A. T., Esq.—Assistant-Physician to the North London Consumption Hospital.
- M'NEIL, W., M.D.—Medical Officer to Port Patrick District, Wigtonshire.
- MEACHAM, E., Esq.—Medical Officer to the St. George's District, Manchester.
- MORRISH, T. F., Esq.—Assistant Medical Officer to the Toxteth Park Workhouse.
- MOWAT, G., Esq.—House-Surgeon to the Swansea Infirmary.
- NEWTON, H. W., Esq.—Medical Officer for No. 2 District of the Newcastle-on-Tyne Union.
- PEARSE, J. S., M.D.—Medical Officer for No. 1 District of the Newcastle-on-Tyne Union.
- PHIPPS, R. B., Esq.—Medical Officer for Rathdrum District, of Wicklow, Ireland.
- THOMAS, G. R., Esq.—Surgeon to the Swansea Infirmary.
- THOMSON, H., Esq.—Medical Officer for the Bangor District, Newtownards Union.
- THORNE, G. L., M.D.—Admiralty Surgeon for Swanage, County Down, Ireland.

WALKER, R., M.D.—Medical Officer to the East Budleigh District, Devon.
WILKIN, J. F., Esq.—Medical Officer to No. 4 District of the Maidstone Union.

DEATHS.

- ANDREWS, Thomas, M.R.C.S., at St. George's-terrace, Canterbury, on August 6, aged 59.
- BENT, James, M.R.C.S., late of Portland-street, Manchester, at Barton-on-Irwell, on August 16, aged 56.
- BRIGHAM, Wm., F.R.C.S., of Brigham, Yorkshire, and Foxley House, Lymm, Cheshire, on July 27, in London. The deceased was formerly Surgeon to the Lock Hospital, at Manchester.
- CAMPBELL, J. C., M.D., late of the 4th Light Dragoons, on August 9, at Stanley Hall, Gloucestershire.
- COMELY, G., M.R.C.S., of Headley, near Liphook, on August 1, at Winchester, aged 35.
- FARRAR, Luke, L.S.A., late of Mercer's-place, Commercial-road, East, at Jersey, on August 6, aged 54.
- FIELD, James, M.D., at Kew-road, Richmond, Surrey, on August 23, aged 81.
- GILCHRIST, A., M.D., Surgeon, R.N., on the retired list, at Kirkton Bank, Carlisle, Lanarkshire, on August 4.
- KING, G., L.S.A., late of Bath, at the Medical College; on August 11, aged 72.
- LANG, Hugh, M.D., at Mansfield, Largs, on August 16, aged 84.
- LOVER, William, M.D., of Talbot-street, Dublin, Lecturer on Physical Science, on August 23, aged 60.
- PANTON, John, M.D., at Bath-street, Glasgow, on July 28.
- PRATT, Charles Edward, M.D., at Bude House, Appledore, North Dean, on July 23, aged 71.
- ROBERTS, James Lewis, M.R.C.S., J.P. for the counties of Glamorgan and Brecon, on August 15, suddenly, at Grovesend, Glamorganshire.
- SIMS, W. H., L.S.A., on July 30, at Winster, near Matlock, Derbyshire, aged 52.
- STONE, Thomas Arthur, F.R.C.S., at 30, Grosvenor-street, W., on August 20, aged 67. This gentleman was the son of Arthur Daniel Stone, M.D., Physician to the Charterhouse; and after receiving a general education at Westminster and the Charterhouse, he entered the medical profession, and became a pupil at St. George's Hospital. Under the guidance of his uncle, Sir Mansfield Clarke, he entered upon the practice of midwifery and diseases of women and children; and for many years previous to his death held a leading position as a practitioner at the West End of London. Soon after he had passed his examination at the College of Surgeons, he joined his uncle in his Lectures on Midwifery and the Diseases of Women and Children. In 1821, Sir Mansfield Clarke ceased lecturing, and Mr. Stone afterwards became associated with Dr. Henry Davies; in conjunction with whom he continued the lectures in Windmill-street until 1830, when they were appointed joint lecturers at St. George's Hospital. At a subsequent period these gentlemen left the hospital school, in consequence of a misunderstanding which took place, and for a period lectured in the school at Grosvenor-place. Still, Mr. Stone retained a friendly feeling towards the institution with which he had for some time been connected, and he gave a marked proof of his sentiment by liberally presenting to the Governors of St. George's Hospital, a few years since, his valuable museum; the formation of which was commenced by Dr. Osborne and Dr. John

Clarke, and completed by Sir Mansfield Clarke and himself. He was for some years one of the staff of Queen Charlotte's Hospital. It is a singular fact that although his talents were of a high order, while he had opportunities for acquiring a vast amount of practical experience, he never added to the literature of the profession; a circumstance greatly to be regretted. In one respect his name will long be honourably remembered, viz., in connection with his kindly and charitable disposition. As President of the Society for the Relief of the Widows and Orphans of Medical Men, he did much in the cause of charity; and his private disposition was in keeping with his public character. His wife (a sister of Dr. Gream) died a few years back. Mr. Stone leaves a family of sons and daughters, but no son in the medical profession, as the one who was intended to follow it, died of cholera in India.

TAYLOR, C. G., M.R.C.S., at Stratford, Essex, on August 14.

THOMSON, Robert Dundas, M.D., F.R.S., F.R.C.P., at his brother's residence, Dunstable House, Richmond, on August 17. He was born in the year 1811, at Eccles, in Berwickshire. He was educated for the medical profession in Edinburgh and Glasgow, where his uncle, Dr. Thomas Thomson, was then Professor of Chemistry. In 1835, he settled as a physician in London, and took an active share in the establishment of the Blenheim-street School of Medicine. His chief attention was directed, however, to Chemistry; and after studying under Liebig, at Giessen, in 1840, he went to Glasgow in 1841 as an assistant to his uncle, the Professor of Chemistry, whose failing condition of health rendered assistance necessary. At the death of his uncle, in 1852, Dr. Dundas Thomson was a candidate for the vacant chair of Chemistry, but being unsuccessful, he returned to London, where he was soon appointed Lecturer on Chemistry at St. Thomas's Hospital Medical School, and at a more recent date he was elected Medical Officer of Health for Marylebone. The latter post he continued to hold until his death. He was also President of the Society of Medical Officers of Health, and of the Meteorological Society, and Physician to the Scottish Hospital. His chief published works were "Experimental Researches on the Food of Animals," "School Chemistry," and the "Cyclopædia of Chemistry, Mineralogy, and Physiology;" and numerous contributions from his pen are contained in various medical and scientific journals, and the transactions of different learned societies.

WILDBORE, D. H. G., M.D., at Charlotte-street, Fitzroy-square, on July 27.

TO CORRESPONDENTS.

* * In consequence of the unusual pressure upon our columns, occasioned by the publication of a large mass of information connected with the subject of Medical Education, we are compelled to defer the insertion of several interesting communications and other matter. To compensate for this extra demand upon our space, a considerable number of pages have been added, as we prefer to incur additional expense instead of following the custom of some of our medical contemporaries, who are in the habit of devoting entire numbers to matter similar to that given in our Students' Number, to the exclusion of all ordinary contents.

At the request of numerous Scotch and Irish subscribers, we purpose to give, with our October number, full information relative to the Universities, Examining Boards, Colleges, Hospitals, and Medical Schools of Scotland and Ireland, at which the Winter Session commences in November, and not in October, as in England.

STUDENTS' NUMBER

OF

THE MEDICAL MIRROR.

ENGLISH UNIVERSITIES AND EXAMINING BOARDS
WHICH GRANT DEGREES AND LICENCES QUALIFYING
TO PRACTISE MEDICINE AND SURGERY.

UNIVERSITY OF OXFORD.

(Founded 872.)

	<i>Elected.</i>
CHANCELLOR, the Earl of Derby	1852
HIGH STEWARD, the Earl of Carnarvon	1859
VICE-CHANCELLOR, J. P. Lightfoot, D.D., Rector of Exeter College	1862
REGISTRAR, E. W. Rowden, D.C.L., late Fellow of New College .	1853

The following statement gives the chief particulars concerning the *University of Oxford* as a place of education in its relations to Medicine.

The affairs of the University are managed, and its regulations are made, either by a Convocation consisting of all Doctors in Divinity, Law, and Medicine, and Masters of Arts, or by the Resident Doctors and Masters, or by the Council.

There are 24 colleges and halls in Oxford. Every student must reside in one or other of these for a period of three years.

During these three years, he has to pass three examinations in Arts, and one in either Mathematics, Natural Science, or Law and Modern History.

A student deciding to graduate in Medicine should proceed as follows :

1st. To enter at a College or Hall.

2nd. To pass all the Examinations in Arts.

3rd. After the Final Classical Examination, to pass two years in study prior to a Scientific Examination for the Degree of Bachelor of Medicine ; and two years more prior to the final or practical Examination for the same Degree.

This Degree confers the Licence to Practise. There is no subsequent Examination for the Degree of Doctor in Medicine. For this degree a dissertation has to be publicly read three years after the B.M.

4th. Besides the three Examinations in Arts the student must pass one of the three schools above-named—Mathematics, Natural Science, and Law and History.

The instruction in Natural Science is carried on at the Museum, where the following teachers have their departments :—

Regius Professor of Medicine, and Clinical Professor, H. W. Acland, M.D.,
LL.D., F.R.S.

Savilian Professor of Astronomy, W. F. Donkin, M.A., F.R.S.
 Savilian Professor of Geometry, H. J. S. Smith, M.A., F.R.S.
 Professor of Experimental Philosophy, R. Walker, M.A., F.R.S.
 Deputy-Professor of Experimental Philosophy, G. Griffith, M.A.
 Professor of Natural Philosophy, B. Price, M.A., F.R.S.
 Professor of Geology, J. Phillips, M.A., LL.D., F.R.S.
 Professor of Mineralogy, M. H. N. Story Maskelyne, M.A.
 Professor of Chemistry, Sir B. C. Brodie, Bart., M.A., F.R.S.
 Linacre Professor of Physiology, G. Rolleston, M.D., F.R.S.
 Professor of Zoology, J. O. Westwood, M.A., F.L.S.

Lee's Reader in Anatomy, W. S. Church, B.A.

Lee's Reader in Chemistry, A. G. V. Harcourt, M.A.

Demonstrator in Anatomy, Charles Robertson.

Radcliffe Librarian, H. W. Acland, M.D., F.R.S.

Sherardian Professor of Botany at the Botanical Garden, C. G. B. Daubeney, M.D., F.R.S.

The Medical Examinations take place annually in the Michaelmas Term.

The Examiners for the current year are as follows :—*First Examination* : H. W. Acland, M.D., G. Rolleston, M.D., H. J. S. Smith, M.A., Sir B. C. Brodie, M.A.—*Second Examination* : H. W. Acland, M.D., J. W. Ogle, M.D., H. Monro, M.D.

Scholarships of about the value of £75 are obtainable at Christ-Church, Magdalen, and other Colleges, by competitive examination in Natural Science. Every year a Radcliffe Travelling Fellowship is competed for by any who, having taken a first class in the Natural Science School, propose to study medicine. The Travelling Fellows receive 200*l.* a-year for three years, half this period being spent in study abroad.

More detailed information concerning the University may be obtained from the University Calendar, to be purchased of any bookseller ; concerning the General Education, from the Heads of Colleges ; concerning the Medical Examinations, from the Regius Professor of Medicine ; and concerning the Scientific Education, from the Professors in the several departments.

UNIVERSITY OF CAMBRIDGE.

CHANCELLOR, the Duke of Devonshire, LL.D.

HIGH STEWARD, Earl Powis, LL.D.

VICE-CHANCELLOR, H. W. Cookson, D.D., St. Peter's Coll.

REGISTRAR, H. R. Luard, M.A., Trinity Coll.

<i>Professorships.</i>	<i>Professors.</i>	<i>College.</i>
Regius Professor of Physic....	H. J. H. Bond, M.D.....	Corpus Christi
Chemistry.....	G. D. Liveing, M.A.....	St. John's
Anatomy.....	W. Clark, M.D.....	Trinity
Botany.....	C. C. Babington, M.A., F.R.S.	St. John's
Downing Prof. of Medicine....	W. W. Fisher, M.D.....	Downing

Lectures.

Lecturers.

Linacre Lecture on Medicine.....	G. E. Paget, M.D.
Human Anatomy—Surgery	G. M. Humphry, M.D., F.R.S.
Chemistry and Practical Chemistry..	G. D. Liveing, M.A.
Superintendence of Dissections	G. F. Helm, F.R.C.S.
Clinical Lectures at Addenbrooke's } Hospital	Physicians and Surgeons to the Hos- pital.

The degrees of BACHELOR OF MEDICINE and MASTER IN SURGERY (which are a complete qualification to practise) may be taken after four or five years from first entrance at the University ; the degree of Doctor of Medicine three years after M.B.

The student must enter at one of the Colleges, selecting which of the seventeen Colleges he pleases, and must reside nine terms, that is, the greater part of each of three years. He must attend the lectures at his College, in Classics and Mathematics, for a year and a half, and pass the PREVIOUS EXAMINATION in those subjects at the end of that time. He may then proceed to the study of Medicine by attending certain of the above-named courses of lectures, and the practice of the hospital, or if he pleases he may prolong the period of Classical or Mathematical study another year and a half, and take a degree in Arts—an honour degree, if he be sufficiently proficient in either of the subjects, or, after the Previous Examination, he may devote himself to Natural Science, and take an honour degree in Arts, by passing in the Natural Sciences Tripos (Botany, Chemistry, Comparative Anatomy, &c.). There is this inducement for the more able and industrious students to go out in an Honour Tripos (Classics, Mathematics, or Natural Science), that the fellowships in the several Colleges, which are of great value, averaging 250*l.* per annum, are given to those who obtain the highest places in a Tripos.

Whichever of these courses the student may take, and he is advised respecting that according to his talents and tastes, after coming to the University, he must, before proceeding to a medical or surgical degree, have spent five years in professional study (four years are sufficient if he have taken an Arts degree in any honour Tripos, as above) ; he must have attended the required courses of lectures, and have passed two medical examinations. The first of these examinations, after three years of medical study, is common to the medical and surgical degrees, and is in Chemistry, Botany, Comparative Anatomy, Human Anatomy, and Physiology, Pathology, Celsus and Aretæus. If the student have gone out in the Natural Sciences Tripos, and have satisfied the Examiner in any of these subjects, he is not required to be again examined in them. The second examination, at the end of the required term of medical study, is distinct for Bachelor of Medicine, and for Master in Surgery. For the former the subjects are Principles and Practice of Physic, Clinical Medicines, Clinical Surgery, Medical Jurisprudence, Obstetrical Medicine ; for the Master in Surgery they are Surgical Anatomy, Pathology, and Surgery, Midwifery, Medical Jurisprudence. The examinations are partly written, partly *vivâ voce* in the hospital and dissecting-room.

The candidate for the degree of Doctor of Medicine keeps an Act, writing a thesis, and undergoing a *vivâ voce* examination.

The expenses, including lectures, are about 150*l.* per annum, but the scholarships ranging in value from 20*l.* to 80*l.* are so numerous that the student who has been well trained at school is pretty sure to defray part of the expense by obtaining one. Some of the scholarships at each College may be competed for before the student enters, and notices of the times of holding the examinations are given, from time to time, in the newspapers, under the head of "University Intelligence," and information may be obtained by addressing the tutor of any particular College.

We would especially call attention to these scholarships, as well as to the fellowships, because the assistance afforded by them to medical as well as other students coming to the University is not sufficiently known.

UNIVERSITY OF LONDON.

Burlington House, Piccadilly, W. (Chartered 1836.)

CHANCELLOR, the Right Hon. Earl Granville, K.G., F.R.S.

VICE-CHANCELLOR, George Grote, Esq., D.C.L., LL.D., F.R.S.

REGISTRAR, Dr. W. B. Carpenter, F.R.S.

Examiners—Faculty of Medicine. *Experimental Philosophy*: G. D. Liveing, Esq., M.A., and Balfour Stewart, Esq., M.A., F.R.S. *Botany and Vegetable Physiology*: J. D. Hooker, M.D., F.R.S., and T. Thomson, M.D., F.R.S. *Chemistry*: H. Debus, Ph.D., F.R.S., and W. A. Miller, M.D., F.R.S. *Practice of Medicine*: E. A. Parkes, M.D., F.R.S., and F. Sibson, M.D., F.R.S. *Surgery*: J. E. Erichsen, Esq., and J. Hilton, Esq., F.R.S. *Anatomy*: G. V. Ellis, Esq., and P. Redfern, M.D. *Physiology, Comparative Anatomy, and Zoology*: G. Busk, Esq., F.R.S., and W. S. Savory, Esq., M.B., F.R.S. *Midwifery*: W. Tyler Smith, M.D., and Charles West, M.D. *Materia Medica and Pharmaceutical Chemistry*: Frederick J. Farre, M.D., and A. B. Garrod, M.D., F.R.S. *Forensic Medicine*: W. A. Guy, M.B., and W. Odling, M.B., F.R.S.

MATRICULATION.

[N.B. Candidates for the Degree of B.A., and for the Degree of B.Sc., or of M.B., who have not graduated in Arts in one of the Universities of the United Kingdom, are required to have passed the Matriculation Examination. This examination is one of those of which every medical student now commencing his studies is required to have passed one; and it is accepted by the Royal College of Surgeons in place of the preliminary examination otherwise necessary from candidates for its Fellowship.]

Two Matriculation Examinations are held in each year; one on the second Monday in January, and the other on the last Monday in June. No candidate is admitted to this examination unless he can produce a certificate showing that he is sixteen years of age. The fee of 2*l*. must be paid previous to the examination. If the candidate be unsuccessful, the fee is not to be returned to him, but he will be admitted to any subsequent Matriculation Examination without payment of any additional fee, on giving the usual notice at least fourteen days before the examination. The candidates are examined by means of printed papers in the following subjects:—Mathematics; Arithmetic and Algebra; Geometry. Natural Philosophy; Mechanics; Hydrostatics; Hydraulics, and Pneumatics; Acoustics, and Optics; Chemistry. Classics; the Greek and Latin Languages. (One Greek and one Latin subject, to be selected by the Senate one year and a half previously.) The English Language; Outlines of English History and Modern Geography; the French or the German Language, at the option of the candidate.

EXAMINATION FOR HONOURS AT MATRICULATION.

Any candidate who has passed may be examined for honours in Mathematics and Natural Philosophy, Classics, Chemistry, and Natural History.

If in the opinion of the Examiners any candidates in the Honours division of not more than twenty years of age shall possess sufficient merit, the first among such candidates shall receive an exhibition of 30*l*. per annum for the next two years; the second among such candidates shall receive an exhibition of 20*l*. per annum for the next two years; and the third shall receive an exhibition of 15*l*. per annum for the next two years; such exhibitions to be payable in quarterly instalments, provided that on receiving each instalment the exhibitioner

shall declare his intention of presenting himself either at the two examinations for B.A., or at the two examinations for B.S.C., or at the Preliminary Scientific and first M.B. examinations, within three academical years from the time of his passing the Matriculation Examination.

Under the same circumstances, the fourth among such candidates shall receive a prize to the value of 10*l.* in books or money; and the fifth and sixth shall each receive a prize to the value of 5*l.* in books or money.

BACHELOR OF MEDICINE.

Candidates for the Degree of Bachelor of Medicine are required—

1. To have passed the Matriculation Examination of this University, or to have taken a Degree in Arts in one of the Universities of the United Kingdom.

2. To have been engaged in their professional studies during four years subsequently to Matriculation or Graduation in Arts, at one or more of the medical institutions or schools recognised by this University; one year, at least, of the four to have been spent in one or more of the recognised institutions or schools in the United Kingdom.

3. To pass the Preliminary Scientific Examination,* and two examinations in Medicine.

PRELIMINARY SCIENTIFIC EXAMINATION.

The Preliminary Scientific Examination takes place once in each year, and commences on the third Monday in July. Candidates must be not less than seventeen years of age, and have passed the Matriculation Examination, or taken a Degree in Arts in one of the Universities of the United Kingdom; and must also have given notice of their intention to the Registrar at least fourteen days before the commencement of the examination. The fee is 5*l.*, not returned in case of rejection; but the candidate is permitted to present himself at any subsequent examination without further fee. Candidates are examined in the following subjects:—Mechanical and Natural Philosophy; Inorganic and Organic Chemistry; Botany and Vegetable Physiology; Zoology. The examinations are conducted by printed papers, and partly by *viva voce* questions, experiments, and demonstrations from specimens.

PRELIMINARY SCIENTIFIC EXAMINATION FOR HONOURS.

Any candidate who has passed the Preliminary Scientific Examination may be examined for honours in (1) Chemistry and Natural Philosophy, or (2) Biology. If in the opinion of the Examiners any candidate of not more than twenty-two years of age shall possess sufficient merit, the candidate who shall distinguish himself most in Chemistry and Natural Philosophy, and the candidate who shall distinguish himself most in Biology, shall each receive an exhibition of 40*l.* per annum for the next two years, payable in quarterly instalments, under the condition that he undertakes to present himself at the first M.B. Examination within three years from the time of his having passed the preliminary scientific examination.

* Candidates who matriculated previously to January, 1861, will not be required to pass the Preliminary Scientific Examination in any other subjects than Chemistry and Botany; and they will be allowed to pass the Preliminary Scientific Examination and the First M.B. Examination in the same year, if they so prefer.

FIRST M.B. EXAMINATION.

This takes place once in each year, and commences on the last Monday in July. Every candidate must produce certificates to the following effect:—1. Of having completed his nineteenth year. 2. Of having passed the preliminary scientific examination at least one year previously. 3. Of having, subsequently to having passed the Matriculation Examination, been a student during two years at one or more of the medical institutions recognised by this University; and of having attended a Course of Lectures on each of the three subjects in the following list:—Descriptive and Surgical Anatomy; General Anatomy and Physiology; Comparative Anatomy; Pathological Anatomy; Materia Medica and Pharmacy; General Pathology; General Therapeutics; Forensic Medicine; Hygiene; Midwifery and Diseases peculiar to Women and Infants; Surgery; Medicine. 4. Of having Dissected during two winter sessions. 5. Of having attended a course of Practical Chemistry, comprehending practical exercises in conducting the more important processes of general and pharmaceutical chemistry; in applying tests for discovering the adulterations of articles of the materia medica, and the presence and nature of poisons; and in the examination of mineral waters, animal secretions, urinary deposits, calculi, &c. 6. Of having attended to Practical Pharmacy. The fee for the examination is 5*l*. Candidates are examined in the following subjects:—Anatomy; Physiology (the papers in Physiology include questions in Histology and Comparative Anatomy); Materia Medica and Pharmacy; Organic Chemistry. The examinations are conducted partly by printed papers, partly by *vivâ voce* examination, and demonstrations.

FIRST M.B. ; EXAMINATION FOR HONOURS.

Any candidate who has been placed in the first division at the first M.B. examination, may be examined for honours in any or all of the following subjects:—Anatomy; Physiology, Histology, and Comparative Anatomy; Materia Medica and Pharmacy, and Pharmaceutical and Organic Chemistry. If in the opinion of the examiners sufficient merit be shown, the candidate who shall distinguish himself the most in either of these three sections, shall receive an exhibition of 40*l*. per annum for two years, subject to his undertaking, when each instalment is paid, to present himself at the second M.B. Examination within three years from the time of his having passed the first M.B. Examination. Under the same circumstances, the first and second candidate in each of the preceding subjects, shall each receive a gold medal of the value of 5*l*.

SECOND M.B. EXAMINATION.

The second M.B. Examination takes place once in each year, and commences on the first Monday in November. No candidate is admitted to this examination within two academical years of the time of his passing the first examination, nor unless he have produced certificates to the following effect:—1. Of having passed the first M.B. Examination. 2. Of having subsequently to having passed the first M.B. Examination, attended a course of lectures on each of two of the subjects comprehended in the previous list, and for which the candidate had not presented certificates at the first M.B. Examination. 3. Of having conducted at least twenty labours. Certificates on this subject will be received from any legally-qualified practitioner in medicine. 4. Of having attended the surgical practice of a recognised hospital or hospitals during two years, with clinical instruction and lectures on clinical surgery. 5. Of having attended the medical practice of a recognised hospital or hospitals during two years, with clinical

instruction and lectures on clinical medicine. N.B. The student's attendance on the surgical and the medical hospital practice specified in Regulations 4 and 5, may commence at any date after his passing the Preliminary Scientific Examination, and may be comprised either within the same or within different years; provided that, in every case, his attendance on hospital practice be continued for at least eighteen months subsequently to his passing the first M.B. Examination. 6. Of having, subsequently to the completion of his attendance on surgical and medical hospital practice, attended to Practical Medicine, Surgery, or Midwifery, with special charge of patients, in a hospital, infirmary, dispensary, or parochial union, during six months. The candidate must also produce a certificate of moral character from a teacher in the last school or institution at which he has studied, as far as the teacher's opportunity of knowledge has extended. The fee for this examination is 5*l*. Candidates shall be examined in the following subjects:—General Pathology, General Therapeutics, and Hygiene; Surgery; Medicine; Midwifery; Forensic Medicine. The examinations shall include questions in Surgical and Medical Anatomy, Pathological Anatomy, and Pathological Chemistry. The examinations are conducted in part by printed papers, in part by *vivâ voce*, and demonstration from specimens, by the performance of surgical operations upon the dead subject, and the application of surgical apparatus, and by reports on medical and surgical patients.

SECOND M.B.; EXAMINATION FOR HONOURS.

Any candidate who has been placed in the first division at the second M.B. examination, may be examined for honours in any or all of the following subjects:—Medicine; Midwifery; Forensic Medicine. If, in the opinion of the Examiners, sufficient merit be evinced, the candidate who shall distinguish himself the most in Medicine, shall receive an exhibition of 50*l*. per annum for the next two years, with the style of University Scholar in Medicine. Under the same circumstances, the candidate who shall distinguish himself the most in Midwifery shall receive an exhibition of 30*l*. per annum for the next two years, with the style of University Scholar in Midwifery. Under the same circumstances the candidate who shall distinguish himself most in Forensic Medicine shall receive 30*l*. per annum for the next two years, with the style of University Scholar in Forensic Medicine. Under the same circumstances, the first and second candidates in each of the preceding subjects shall each receive a gold medal of the value of 5*l*.

MASTER IN SURGERY.

The examination for the degree of Master in Surgery takes place once in each year, and commences on the first Monday in March. No candidate is admissible unless he have produced certificates to the following effect:—1. Of having taken the degree of Bachelor of Medicine in this University. 2. Of having attended a course of instruction in Operative Surgery, and of having operated on the dead subject. 3. Of having, subsequently to having passed the first M.B. Examination, attended to Practical Surgery, with special charge of patients, in a hospital, infirmary, dispensary, or parochial union, during six months. The fee for this examination is 5*l*. The examinations are conducted in part by printed papers, in part *vivâ voce*, and also include the performance of surgical operations on the dead subject, the application of surgical apparatus, and reports on surgical cases.

MASTER IN SURGERY; EXAMINATION FOR HONOURS.

Any candidate who has passed the M.S. Examination, may be examined

for Honours in Surgery. If in the opinion of the Examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in Surgery, shall receive 50*l.* per annum for the next two years, with the title of University Scholar in Surgery. Under the same circumstances, the first and second candidates shall each receive a gold medal of the value of 5*l.*

DOCTOR OF MEDICINE.

The examination for the degree of Doctor of Medicine takes place once in each year, and commences on the fourth Monday in November. No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—1. Of having taken the degree of Bachelor of Medicine in this University. 2. Of having attended, subsequently to having taken the degree of Bachelor of Medicine in this University; *a.* To clinical or practical medicine during two years in a hospital or medical institution recognised by this University. *b.* Or, to clinical or practical medicine during one year in a hospital or medical institution recognised by this University, and of having been engaged during three years in the practice of his profession. *c.* Or of having been engaged during five years in the practice of his profession, either before or after taking the degree of Bachelor of Medicine in this University. One year of attendance on clinical or practical medicine, or two years of practice, will be dispensed with in the case of those candidates who at the second examination have been placed in the first division. 3. Of moral character, signed by two persons of respectability. The fee for the degree of Doctor of Medicine is 5*l.* The examination is conducted by means of printed papers and *vivâ voce* interrogation, and by reports on the cases of medical patients. Candidates are examined in the following subjects:—Logic and Moral Philosophy. (Candidates who have taken a degree in Arts in this University, or in a University, the degrees granted by which are recognised by the Senate of this University, shall be exempted from this part of the examination.) If in the opinion of the Examiners, sufficient merit be evinced, the candidate who shall distinguish himself the most at the examinations shall receive a gold medal of the value of 20*l.*

UNIVERSITY OF DURHAM.

FOR THE LICENCE IN MEDICINE.

Residence at Durham is not imperative. A candidate must have passed one of the Arts Examinations in the list recommended by the General Medical Council, after which he must have been registered at Durham or Newcastle, as a Medical Student. He must produce certificates of having afterwards spent four years in Medical Study, according to the subjoined Curriculum, at the College of Medicine at Newcastle, or at some other Medical School recognised by the University; of good moral conduct, and of having attained the age of twenty-one years.

FOR THE MASTERSHIP IN SURGERY.

The regulations are the same as those for the Licence in Medicine, except that the final Examination is directed more particularly to Surgery.

CURRICULUM.

Candidates for the Licence in Medicine, and for the degree of Master in

Surgery, must bring certificates of having, during their four years of study, attended two six months' courses of lectures on Anatomy and on Physiology, on Medicine and on Surgery. One six months' course on Chemistry. Of having been engaged in Dissections for two winter sessions. Of having attended two three months' courses of Lectures and Demonstrations on Morbid Anatomy. One three months' course of Lectures on Botany, on Materia Medica, on Practical Chemistry, on Midwifery, and on Medical Jurisprudence, and of having been engaged in Practical Pharmacy for three months.

FOR THE DEGREE OF BACHELOR IN MEDICINE.

Residence during three terms at Durham is necessary. A candidate must have obtained a Degree in Arts of the University of Durham, or have passed the final Examination for the Degree of Bachelor of Arts, or one equivalent thereto; must be a Licentiate in Medicine of the University, and of the standing of twenty-one terms (seven years) from the date of his Matriculation at Durham.

The Examination consists in writing an Essay on some Medical subject appointed by the Warden and Senate, and in passing an Examination thereon.

FOR THE DEGREE OF DOCTOR OF MEDICINE.

A candidate must be a Bachelor in Medicine of the University of Durham, and of the standing of twenty-four terms (eight years) from the date of his Matriculation at Durham. The examination *is similar to that for the Degree of Bachelor in Medicine*. The examinations for the Licence in Medicine and the Degree of Master in Surgery, are conducted partly at Durham, by printed papers of questions and *vivâ voce*, and partly at Newcastle, in a practical manner in Anatomy, Surgery, Chemistry, and Medicine. The examinations for the Degrees of Bachelor and Doctor in Medicine are conducted at Durham. The examinations are held, except in special cases, yearly, in the month of June, at the close of Easter Term. The Licences and Degrees are conferred in Convocation at Durham. The Examiners are appointed yearly by the Warden of the University, and approved by Convocation.

REGISTRATION EXAMINATION.

The Registration Examinations are held at Durham.

The following are the subjects of examination:—1. The History contained in St. Matthew's Gospel. 2. English Grammar and Writing from Dictation. 3. Arithmetic, including Vulgar and Decimal Fractions. 4. History of the Reign of Elizabeth. 5. To draw from memory an outline Map showing the coast line, the chief ranges of mountains, and the principal rivers of some one of the following countries, to be selected by the Examiners:—Great Britain, Ireland, Italy. Questions also will be set in the Geography of these countries. 6. Translations, with grammatical questions from some one of the following subjects, to be selected by the candidates:—1. Cæsar de Bello Gallico, Book iv. 2. Cicero de Amicitia. 3. Virgil. First Book of the Æneid. 4. Horace. First Book of the Odes. 7. Any candidate may, if he pleases, offer himself for examination in any one or more of the following three subjects:—First Book of Euclid. First Book of Xenophon's Anabasis, in Greek, and Greek Grammar. Voltaire's History of Charles XII. in French, and French Grammar. Candidates who wish to be examined on any of these subjects must give notice of their intention ten days, at least, before the Examination.

ROYAL COLLEGE OF PHYSICIANS,

Pall Mall, East, S.W.

PRESIDENT, Thomas Watson, M.D., D.C.L.

CENSORS, P. Black, M.D., C. West, M.D., C. H. Jones, M.D., W. R. Basham, M.D.

TREASURER, J. Alderson, M.D.

REGISTRAR, H. A. Pitman, M.D.

LIBRARIAN, W. Munk, M.D.

CURATORS OF THE MUSEUM, the President and Dr. Alderson, Dr. Roc, Dr. Wegg, and Dr. Sibson.

BEDELL, Mr. Copney.

The government of the corporation is vested in the President and Fellows only. The *Members* of the College are alone eligible to the Fellowship. They have the use of the library and museum, subject to certain regulations, and are admitted to all lectures. The *Licentiates* of the College are entitled to register under the Medical Act, and to practice Medicine, Surgery, and Midwifery in any part of her Majesty's dominions, and may compound or dispense medicines for patients *under their own care*. The Licence of the College is recognised by the Poor-law Board.

The EXAMINERS for the Membership are the President and Censors. The examination for the Membership takes place four times a year, viz., shortly before Christmas, Easter, Midsummer, and Michaelmas. The Examiners for the Licence are Drs. Markham, Kirkes, Rees, Odling, Barker, Risdon Bennett, A. Farre, and Barnes, and Messrs. Le Gros Clark and De Morgan. The examination is divided into two parts—the *first part* commences on the first Tuesday, and the *second part* on the second Tuesday in alternate months. FEES.—*Membership*, 3*l.* 10*s.* *Licence*, 15*l.* 15*s.*

EXTRACTS FROM BYE-LAWS AND REGULATIONS.

MEMBERS.

I. The Members of the College, present and future, shall be alone eligible to the Fellowship. They shall have the use of the library and museum, subject to the regulations relating thereto, and shall be admitted to all lectures, and shall enjoy such further privileges as may from time to time be defined by the bye-laws; but they shall not be entitled to any share in the government, or to attend or vote at general meetings, of the Corporation.—II. All persons who have been admitted before February 16th, 1859, Licentiates of the College, shall be entitled to be admitted Members of the College, provided that they have, since their admission as Licentiates, obeyed the bye-laws, and do accept such Membership, and engage henceforth to obey the bye-laws of the College.—III. Any Extra-Licentiate who shall have produced testimonials as to character satisfactory to the Censors, and shall have assured the said Censors that he is not engaged in the practice of pharmacy, and who shall comply with such other regulations as are required by the bye-laws of the said Corporation, may be proposed to the College to be admitted a Member of the College.—IV. All candidates for the Membership of the College, who have commenced their professional studies after September, 1861, shall satisfy the Censors' Board that previously to the commencement of their professional studies, they have obtained a Degree in Arts from some University of the United Kingdom, or of the colonies, or from some other University specially recognised by the Medical Council, or that they have passed examinations equivalent to those required for a Degree in Arts. All other candidates for Membership shall, before admission to the professional examination, be

examined on the subjects of General Education by the President and Censors of the College.—V. Any person who does not dispense or supply medicine, and who shall have satisfied the College touching his knowledge of Medical and General Science and Literature, and who shall comply with the bye-laws and regulations of the College, may be proposed to the College to be admitted a Member of the College.—VI. Every candidate for Membership, under the last bye-law, shall furnish proof that he has attained the age of twenty-five years.—VII. Every such candidate shall produce a testimonial from a Fellow or Member of the College, satisfactory to the Censors' Board, to the effect that, as regards moral character and conduct, he is a fit and proper person to be admitted a Member of the College.—VIII. Every such candidate shall produce proof of having passed an examination in the subjects of General Education; and in the case of candidates who shall have commenced their professional studies after September, 1861, the examination in General Education must have been passed before they commenced their professional studies.—IX. Every such candidate (*except such as shall be admissible under the provisions of Section XVIII*) shall produce proof of his having been engaged in the study of physic during a period of five years, of which four years at least shall have been passed at a medical school or schools, recognised by the College.—X. Every such candidate (*except such as shall be admissible under the provisions of Section XVIII*) shall produce evidence, satisfactory to the Censors' Board, of his having studied the following subjects:—Anatomy, with Dissections; Physiology; Chemistry, with Practical Chemistry; Materia Medica and Botany; Morbid Anatomy; Principles and Practice of Medicine; Principles and Practice of Surgery; Midwifery, and the Diseases Peculiar to Women and Children; Forensic Medicine; of his having attended diligently during three years the Medical Practice, and during one year the Surgical Practice, of a hospital containing at least 100 beds; and of his having served the office of Clinical Clerk during at least six months.—XI. Every such candidate who has prosecuted his studies abroad, whether in part or to the full extent required by the preceding bye-law (*except such as shall be admissible under the provisions of Section XVIII*) shall, nevertheless, bring proof of his having attended, during at least twelve months, the medical practice of a hospital in the United Kingdom containing 100 beds.—XII. If the Censors' Board should doubt the sufficiency of the certificates and testimonials produced by any such candidate, or his fitness, in any respect, for admission to examination, they may submit the case to a general meeting of the Fellows.—XIII. No such candidate shall be admitted to examination who is engaged in trade, or who dispenses medicine, or makes any engagement with a chemist, or any other person, for the supply of medicines, or who practices medicine or surgery in partnership, by deed or otherwise, so long as that partnership continues.—XIV. No such candidate shall be admitted to examination who refuses to make known, when so required by the President and Censors, the nature and composition of any remedy he uses.—XV. Every such candidate (*except in cases specially exempted under Sections XVII and XVIII*) shall have given proof of his acquirements by written answers to questions placed before him, and shall have been examined *vivâ voce* at three separate meetings of the Censors' Board, and shall have been approved by the President and Censors, or by the major part of them, at each examination.—XVI. Except so far as otherwise provided by bye-law, the candidate for Membership shall be examined in Physiology, in Pathology, and in Therapeutics, in three separate examinations, by written questions, as well as *vivâ voce*, at three meetings of the Censors' Board. At, or in connection with, the second examination before the Censors' Board, the candidate's knowledge of Practical Medicine shall be tested by requiring him to examine persons labouring under disease, and to describe morbid specimens. At the commencement of the first *vivâ voce* examination, the candidate

may, if he think fit, declare, in writing, what honours have been conferred upon him, in regard to his knowledge of literature, science, or medicine; and such declaration shall, if it seem fit to the Censors' Board, be recorded in the annals of the College.—XVII. Any such candidate who has already obtained the Degree of Doctor or Bachelor of Medicine at a University in the United Kingdom, wherein the courses of study and the examinations to be undergone by the students previously to graduation shall have been adjudged by the Censors' Board to be entirely satisfactory, shall be exempt (if the Censors shall think fit) from all or any parts of the examinations hereinbefore described, except such as relate to Pathology and Therapeutics. Every candidate for the Membership will, however, be required to translate into English a passage from a Latin author, and he will have the opportunity of showing a knowledge of Greek, or of one or more of the modern European languages.—XVIII. If any such candidate who has attained the age of forty years, but has not fulfilled all the conditions required by Sections VIII, IX, and X, shall produce testimonials not merely satisfactory as to his moral character and conduct, and his general and professional acquirements, but further showing that he has improved the art or extended the science of medicine, or has at least distinguished himself as a medical practitioner, the Censors' Board having well weighed and considered these testimonials, may, if they see fit, submit them to the Fellows at a general meeting, and it shall be determined by the votes of the Fellows present, or of the majority of them, taken by ballot, whether the candidate shall be admitted to examination, which shall, in every such case, be as full and complete as the Censors may deem sufficient.—XIX. Every candidate must give fourteen days' notice in writing to the Registrar of the College of his intention to present himself for examination, and all certificates and testimonials required by the bye-laws must be left with the Registrar of the College at least fourteen days before the day of examination.—XX. Any candidate not approved by the Censors' Board shall not (except by special permission of the College) be re-admitted to examination until after the lapse of a year.—XXI. Every candidate approved by the Censors' Board shall be proposed at the next general meeting of Fellows, as qualified to become a Member of the College; and if the majority of the Fellows present shall consent, he shall, on complying with the regulations prescribed by the bye-laws, be admitted a Member of the College.

LICENTIATES.

Every candidate for the College Licence (except in cases especially exempted) is required to produce satisfactory evidence to the following effect:—I. Of having attained the age of twenty-one years.—II. Of moral character.—III. Of having passed a preliminary examination on the subjects of General Education.—IV. Of having been registered as a Medical Student by one of the bodies named in Schedule (A) of the Medical Act.—V. Of having been engaged in professional studies during four years, of which at least three years shall have been passed at a recognised medical school or schools, and of having attended the Medical Practice at a recognised hospital or hospitals during two years of that period, and the Surgical Practice during twelve months; and of having been engaged during six months in the Clinical Study of Diseases peculiar to Women. The last of the four years of professional study must be passed at a medical school, hospital, infirmary, or dispensary, recognised by the College.—VI. Of having studied the following subjects:—Anatomy (with Dissections) during two winter sessions of six months each; Physiology during two winter sessions, of six months each; Chemistry during six months; Practical Chemistry during three months; Materia Medica during three months; Practical Pharmacy during three months; (by Prac-

tical Pharmacy is meant instruction in the laboratory of a registered medical practitioner, or of a Member of the Pharmaceutical Society of Great Britain, or of a chemist and druggist recognised by the College on special application, or of a public hospital or dispensary recognised by the College); Botany during three months; Morbid Anatomy during six months; (or certified attendance in the Post-mortem Room during the period of Clinical Study); Principles and Practice of Medicine during two winter sessions of six months each. It is desired that the study of the Principles and Practice of Medicine should comprise the study of the principles of Public Health; Principles and Practice of Surgery during six months; Clinical Medicine during one winter session, and one summer session, or nine months; Clinical Surgery during six months; (by Clinical Medicine and Clinical Surgery are intended lectures on cases under observation, or special instruction at the bed-side, certified by the Teacher); Midwifery and the Diseases peculiar to Women during three months; (a certificate must also be produced of having attended not less than twenty Labours); Forensic Medicine during three months.—VII. Of having passed the Professional Examinations.

Every candidate for the College Licence is required to produce satisfactory evidence, before admission to examination, of having been registered as a Medical Student by one of the bodies named in Schedule (A) of the Medical Act.

Any candidate who shall fail to pass either of these examinations, shall not be re-admitted to examination until after the lapse of six months. Any candidate, being a "Registered Medical Practitioner," whose qualification or qualifications shall have been obtained before the first day of January, 1861, having been, with the consent of the College, admitted a candidate for the Licence, will be examined on the Principles and Practice of Medicine, Surgery, and Midwifery; but he will be exempted from such other parts of the Professional Examination, as his qualifications may seem to the Examiners to render in his case unnecessary. Any candidate who has already obtained the degree of Doctor or Bachelor of Medicine at an University approved and recognised by the College, after a course of study and an examination satisfactory to the College, shall be exempt from the first part of the Professional Examination for the Licence. Any candidate who has already obtained the Licence of the Royal College of Physicians of Edinburgh, or of the King and Queen's College of Physicians in Ireland, after a course of study and an examination satisfactory to the Examiners appointed by the College, shall be exempt from the first part of the Professional Examination for the Licence.

THE PRELIMINARY EXAMINATION.

The Examiners on the subjects of General Education are Drs. F. Hawkins, Spurgin, and H. Thomson.

The Preliminary Examination will be held at the College on the fourth Tuesday and Wednesday, in March and September. Subjects:—English and Latin. English will include English Grammar and Composition. Latin will include selections from authors previously fixed upon. English History and Modern Geography. Mathematics and Natural Philosophy. Mathematics will include the ordinary rules of Arithmetic, Vulgar and Decimal Fractions, Simple Equations and the First Book of Euclid. Natural Philosophy will include Mechanics, Acoustics, Hydrostatics, Hydraulics and Pneumatics, Optics. Such a knowledge of these subjects will be expected as may be obtained from attendance on a course of Lectures, or from Elementary Treatises on Physics or Natural Philosophy. The examination will be conducted in writing; but the Examiners are not precluded from questioning any candidate orally, if they think fit. The Preliminary Examination must be passed previously to the time of commencing studies

at a medical school ; but in the case of candidates who have commenced the prescribed course of Medical Studies before the 1st day of October, 1861, the examination in General Education may be passed at any time before the examination for the Licence. A candidate who shall fail to pass the examination, will not be re-admitted to examination until after the lapse of six months. Every candidate intending to present himself for the Preliminary Examination, must give fourteen days' notice in writing to the Registrar of the College ; and before he is admitted to the examination, he must pay a fee of two guineas. Should he fail to pass the examination the fee will not be returned, but he may be admitted to a subsequent Preliminary Examination without the payment of an additional fee. Testimonials of Proficiency granted by the National Educational bodies, according to the following list, with such additions as may from time to time be made, will be accepted by the Examiners as satisfactory, in lieu of the Preliminary Examination conducted at the College.—A Degree in Arts of any University of the United Kingdom, or of the Colonies, or of such other Universities as may be specially recognised from time to time by the Medical Council ; Oxford Responsions or Moderations ; Cambridge Previous Examinations ; Matriculation Examination of the University of London ; Oxford Middle Class Examinations, Senior ; Cambridge Middle Class Examinations, Senior ; Durham Middle Class Examinations, Senior ; Durham Examinations for Students in Arts, in their second and first years ; Durham Registration Examination for Medical Students ; Dublin University Entrance Examinations ; Queen's University, Ireland, two years Arts' course for the Diploma of Licentiate in Arts ; Preliminary Examinations at the end of A. B. Course ; Middle Class Examinations ; Matriculation Examinations ; First Class Certificate of the College of Preceptors ; Examination in Arts at Codrington College, Barbadoes ; Second Class in Literature and Science of the Cape of Good Hope ; an Examination established by any of the bodies named in Schedule A of the Medical Act, and approved by the Medical Council. Any certificate which does not affirm the proficiency of the candidate in Latin, will not be deemed a sufficient proof of Preliminary Examination. After September, 1865, the Preliminary Examination in the subjects of General Education, will cease to be conducted at the College, and no other testimonials of proficiency than those granted by the National Educational bodies, approved by the Medical Council, will, after that date, be accepted as proof of a sufficient General Education.

THE PROFESSIONAL EXAMINATION.

Students preparing for the Professional Examination for the Licence are required either to register at this College within fourteen days from the commencement of each Session, or to furnish proof, before admission to examination, of having been thus registered by one of the bodies named in Schedule (A) of the Medical Act. Every candidate, before he is admitted to examination, will be required to sign a Declaration, stating whether he has or has not been rejected within three months by any of the Examining Boards included in Schedule (A) of the Medical Act. The examination is divided into two parts. The subjects of examination at the first part are :—Anatomy and Physiology, Chemistry, Materia Medica, Practical Pharmacy. The examination is partly by written, partly by oral questions. The second part comprises :—Principles and Practice of Medicine, Midwifery, and the Diseases peculiar to Women, and Surgery. It is conducted partly by written questions, and partly by practical examination, the candidates being required to examine persons labouring under disease, in the wards of a hospital. The first part of the Professional Examination is to be undergone after the termination of the second winter session of study at a recognised Medical School, and the second part after an interval of

at least eighteen months from the first examination, except in the case of students who have commenced their professional education before October, 1861. Any candidate who shall fail to pass either of these examinations, will not be re-admitted to examination until after the lapse of six months. Every candidate intending to present himself for examination must give fourteen days' notice, in writing, to the Registrar of the College, with whom all certificates and testimonials must be left fourteen days before the day of examination. Blank forms of the required Certificates of Attendance on Hospital Practice and on Lectures may be obtained on application at the College. The fee for admission to the first part of the examination is five guineas; the fee for admission to the second part of the examination is ten guineas; and there is no further fee for the Licence. Any candidate who has already obtained the degree of Doctor or Bachelor of Medicine at an University, approved and recognised by the College, after a course of study and an examination satisfactory to the College, shall be exempt from the first part of the professional examination for the Licence. Any candidate who has already obtained the Licence of the Royal College of Physicians of Edinburgh, or of the King and Queen's College of Physicians in Ireland, after a course of study and an examination satisfactory to the Examiners appointed by the College, shall be exempt from the first part of the Professional Examination for the Licence. Any "Registered Medical Practitioner," whose qualification or qualifications shall have been obtained before the first day of January, 1861, having been, with the consent of the College, admitted a candidate for the Licence, will be examined on the Principles and Practice of Medicine, Surgery, and Midwifery; but he will be exempted from such other parts of the Professional Examinations as his qualifications may seem to the Examiners to render in his case unnecessary. The fee for admission to examination is fifteen guineas.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Lincoln's Inn Fields, London, W.C.

Charter of Incorporation, 22nd March, 1800; other Charters, 13th February, 1822; 14th September, 1843, and 18th March, 1852. Number of Council, 24.

COUNCIL.—*President*, Joseph Hodgson, Esq.; *Vice-Presidents*, Thomas Wormald, and Francis Kiernan, Esqs.; *other Members of Council*, Messrs. John Adams, Arnott, Busk, Le Gros Clark, Cock, Curling, Ferguson, Hancock, Hilton, Lane, Lawrence, Luke, Mackmurdo, Paget, Partridge, Quain, Shaw, Skey, Solly, South, and Swan.

COURT OF EXAMINERS.—*President*, Joseph Hodgson; *Vice-Presidents*, Messrs. Thomas Wormald and Francis Kiernan; Arnott, Cæsar Hawkins, Lawrence, Luke, South, and Partridge; *Secretary*, Mr. Edmund Belfour; *Assistant-Secretary*, Mr. E. J. Trimmer; *Clerk*, Mr. T. M. Stone.

REGULATIONS RESPECTING THE EDUCATION AND EXAMINATION OF CANDIDATES FOR THE DIPLOMA OF MEMBER OF THIS COLLEGE.

SECTION I.

Preliminary General Education and Examination.—Candidates who have commenced their professional education on or after the 1st of January, 1861, will be required to produce one or other of the following certificates: 1. Of Graduation in Arts at a University recognised for this purpose. The following are the Universities at present recognised, viz., Oxford, Cambridge, Dublin, London, Durham, and Queen's University in Ireland; Calcutta, Madras, and Bombay; Canada—McGill College, Montreal, and Queen's College, Kingston. 2. Of having passed an examination for

Matriculation, or such other examination, as shall in either case, from time to time, be sanctioned by the Council of this College, at a University in the United Kingdom, or at a colonial or foreign University recognised by the Council of this College. The following are the preliminary examinations which are at present recognised under this clause (No. 2), viz., Oxford—Responsions or Moderations, Middle-Class Examinations, Senior; Cambridge—Previous Examination, Middle-Class Examinations, Senior; Dublin—Entrance Examination; London—Matriculation Examination; Durham—Examination of Students in Arts in their second and first years, Middle-Class Examinations, Senior and Junior, Registration Examination for Medical Students; Queen's University in Ireland—Two years' Arts' Course for Diploma of Licentiate in Arts, Preliminary Examinations at end of B.A. Course, Middle-Class Examinations, Matriculation Examinations; Queen's College, Belfast—Preliminary Examination for non-Matriculated Students; Edinburgh—Extra Professional Examination for Graduation in Medicine; Calcutta, Madras, and Bombay—Matriculation Examinations; McGill College, Montreal—Preliminary Examination in General Literature; Queen's College, Kingston, Canada—Matriculation Examination, Preliminary Examination of Students in Medicine. 3. Of having passed the Preliminary Examination of the Royal College of Physicians of London. 4. Of having passed the Preliminary Examination for the Fellowship of this College. 5. Of having passed the Preliminary Examination of the Faculty of Physicians and Surgeons of Glasgow. 6. Of having passed the First Class Examination of the Royal College of Preceptors. 7. Candidates who shall not be able to produce one or other of the foregoing certificates, will be required to pass an examination in English, Classics, and Mathematics, conducted by the Board of Examiners of the Royal College of Preceptors, under the direction and Supervision of the Council of this College.

The following are the subjects of the examination during the years 1864 and 1865, viz.: Part I.—1. Reading aloud a passage from some English author. 2. Writing from dictation. 3. English grammar. 4. Writing a short English composition; such as a description of a place, an account of some useful or natural product, or the like. 5. Arithmetic. No candidate will be passed who does not show a competent knowledge of the first four rules, simple and compound, of vulgar fractions and of decimals. 6. Questions on the Geography of Europe, and particularly of the British Isles. 7. Questions on the outlines of English History, that is, the succession of the sovereigns and the leading events of each reign. 8. Euclid, books i. and ii. 9. Translation of a passage from the first book of Cæsar's Commentaries, "De Bello Gallico." Part II.—Papers will also be set on the following seven subjects, and each candidate will be required to offer himself for examination on one subject at least, at the option of the candidate; but no candidate will be allowed to offer himself for examination on more than four subjects: 1. Translation of a passage from St. John's Gospel in Greek. 2. Translation of a passage from Voltaire's "Histoire de Charles XII." 3. Translation of a passage from the first two books of Schiller's "Geschichte des dreissigjährigen Krieges."

Besides these translations into English, the candidate will be required to answer questions on the grammar of each subject, whether compulsory or selected. 4. Mathematics. Algebra to Simple Equations inclusive. 5. Mechanics. The questions will be chiefly of an elementary character. 6. Chemistry. The questions will be on the elementary facts of Chemistry. 7. Botany and Zoology. The questions will be on the classification of plants and animals. The quality of the handwriting and the spelling will be taken into account.

SECTION II.

Professional Education.—I. Professional studies are not recognised prior to the date at which the candidate shall have passed an examination in

General Knowledge, in conformity with the regulation in the preceding section.*

II. The following will be considered as the commencement of professional education:—1. Attendance on the practice of a hospital, or other public institution recognised by this College for that purpose. 2. Instruction as the pupil of a legally qualified surgeon, *holding the appointment of Surgeon to a Hospital, General Dispensary, or Union Workhouse, or where such opportunities of practical instruction are afforded as shall be satisfactory to the Council.* 3. Attendance on Lectures on Anatomy, Physiology, or Chemistry, by Lecturers recognised by this College.

The commencement of professional study, otherwise than by attendance on Lectures in recognised Medical Schools, or by attendance on the Practice of recognised Hospitals, will not be admitted until a certificate thereof shall be furnished to the Secretary for registration at the College, by the practitioner whose pupil the candidate shall have become, or by the Medical Superintendent of the Hospital or other institution to the practice of which he shall have entered; and will, consequently, date only from the reception of such certificate by the Secretary, the certificate to be accompanied by proof of having passed the necessary Preliminary Examination in General Knowledge.

III. Candidates will be required to produce the following other Certificates, viz.:—1. Of being twenty-one years of age. 2. Of having been engaged during four years in the acquirement of professional knowledge. 3. Of having studied Practical pharmacy during three months. 4. Of having attended Lectures on Anatomy, delivered not less frequently than four times in each week, during two winter sessions. 5. Of having performed Dissections during not less than two winter sessions. 6. Of having attended Lectures on Physiology, delivered not less frequently than twice in each week, during two winter sessions. 7. Of having attended Lectures on Surgery during two winter sessions, *of which one course must not be earlier than the third winter session at a recognised Medical School.* 8. Of having attended one Course of Lectures on each of the following subjects, viz., Chemistry, Materia Medica, Medicine, and Midwifery. 9. Of instruction and proficiency in the practice of Vaccination. 10. Of having attended, at a recognised hospital or hospitals in the United Kingdom or Colonies, the Practice of Surgery, and Clinical Lectures on Surgery, during three winter and two summer sessions. 11. Of having attended, at a recognised hospital or hospitals in the United Kingdom or Colonies, the Practice of Medicine, and Clinical Lectures on Medicine, during one winter and one summer session. 12. *Of having subsequently to the completion of two years' professional education taken charge of patients under the superintendence of a Surgeon during not less than six months, at a hospital, general dispensary, or parochial or union infirmary, recognised for this purpose, or in such other similar manner as, in the opinion of the Council, shall afford sufficient opportunity for the acquirement of Practical Surgery.*

N.B.—Blank forms of the required Certificates may be obtained on application to the Secretary, and all such Certificates will be retained at the College.

SECTION III.

I. Certificates will not be received on more than one branch of science from one and the same Lecturer; but Anatomy and Dissections will be considered as one branch of science.

II. Certificates will not be recognised from any hospital in the United Kingdom unless the Surgeons thereto be members of one of the legally

* This regulation applies to candidates who commenced their professional education on or after the 1st of October, 1862.

constituted Colleges of Surgeons in the United Kingdom; nor from any School of Anatomy and Physiology or Midwifery, unless the teachers in such school be members of some legally constituted College of Physicians or Surgeons in the United Kingdom; nor from any School of Surgery, unless the teachers in such school be members of one of the legally constituted Colleges of Surgeons in the United Kingdom.

III. No Metropolitan Hospital will be recognised by this College which contains less than 150, and no Provincial or Colonial Hospital which contains less than 100 patients.

IV. The recognition of Colonial Hospitals and Schools is governed by the same regulations, with respect to number of patients, and to Courses of Lectures, as apply to the recognition of Provincial Hospitals and Schools in England.

V. Certificates of Attendance, upon the practice of a recognised provincial or colonial hospital unconnected with, or not in convenient proximity to, a recognised Medical School, will not be received for more than one winter and one summer session of the hospital attendance required by the regulations of this College; and in such cases Clinical Lectures will not be necessary, *but a Certificate of having acted as Dresser for the period of at least six months will be required.*

VI. Certificates will not be received from candidates who have studied in London, unless they shall have registered at the College their cards of admission to attendance on lectures and hospital practice within fifteen days from the commencement of the session; nor from candidates who have studied in the provincial schools in England, unless their names shall be duly returned from their respective schools. N.B.—At the registration in October, candidates who shall have commenced their professional education subsequently to the 1st of October, 1862, will be required to produce a Certificate of having passed one or other of the Preliminary Examinations in General Knowledge recognised by this College.

VII. Those candidates who shall have pursued the whole of their studies in Scotland or Ireland, will be admitted to examination upon the production of the several Certificates required respectively by the Colleges of Surgeons of Edinburgh, the Faculty of Physicians and Surgeons of Glasgow, and the College of Surgeons in Ireland, from candidates for their Diploma, together with a Certificate of instruction and proficiency in the practice of Vaccination; and in the case of candidates who shall have pursued the whole of their studies at recognised foreign or colonial Universities, upon the production of the several Certificates required for their Degree by the authorities of such Universities, together with a Certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied at least four entire years in the acquirement of professional knowledge.

VIII. Members or Licentiates of any legally constituted College of Surgeons in the United Kingdom, and Graduates in Surgery of any University recognised for this purpose by this College, will be admitted to Examination on producing their Diploma, Licence, or Degree, together with proof of being twenty-one years of age, of having been occupied at least four years in the acquirement of professional knowledge, and of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied at least four entire years in the acquirement of professional knowledge.

IX. Graduates in Medicine of any legally constituted College or University recognised for this purpose by this College, will be admitted to examination, on adducing, together with their Diploma or Degree, proof of being twenty-one years of age, of having been occupied at least four years in the acquirement of professional knowledge, and of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having

been occupied at least four years in the acquirement of professional knowledge.

NOTE.—*The Regulations in italics apply to candidates in the United Kingdom commencing their professional education on or after the 1st of October, 1863; and to candidates commencing their professional education in the Colonies, from and after the 1st of October, 1864.*

SECTION IV.

Professional Examination.—This examination is divided into two parts.

1. The first, or primary examination, on Anatomy and Physiology, is partly written and partly demonstrative on the recently dissected subject and on prepared parts of the human body. 2. The second, or Pass Examination, on Pathology, Surgery, and Surgical Anatomy, is partly written and partly oral. 3. The Primary Examinations are held in the months of January, April, May, July, and November, and the Pass Examinations generally in the ensuing week respectively. 4. Candidates will not be admitted to the Primary, or Anatomical and Physiological Examination, until after the termination of the second winter session of their attendance at a recognised school or schools; nor to the Pass, or Pathological and Surgical Examination, until after the termination of the fourth year of their professional education. 5. Candidates, being Graduates in Medicine of either of the Universities of Oxford, Cambridge, or London, will be required to present themselves for the Pass Examination in Pathology and Surgery only. 6. The fee of five guineas paid by each candidate, prior to his Primary Examination, will not be returned, but will be allowed in the fee on his admission as a Member. 7. A candidate having entered his name for either the Primary or Pass Examination, who shall fail to attend the meeting of the Court for which he shall have received a card, will not be allowed to present himself for Examination within the period of three months from the date at which he shall have so failed to attend. 8. A candidate referred on the Primary Examination is required, prior to his admission to re-examination, to produce a certificate of the performance of dissections during not less than three months, subsequently to the date of his reference.

CANDIDATES FOR THE FELLOWSHIP.

1. Except in the cases and instances hereinafter provided for to the contrary, every candidate for the Fellowship, whether a Member of the College or not, is required to produce certificates satisfactory to the Court of Examiners—That he is twenty-five years of age. That he is (if found qualified upon examination) a fit and proper person to be admitted to the Fellowship, which certificate must be signed by three Fellows. That he has passed the Preliminary Examination in Classics, Mathematics and French, appointed by the Council; or that he has passed in the University of Oxford, or Cambridge, or London, the Examination in Arts required in those Universities respectively, of candidates for their Degrees in Medicine. That he has been engaged for six years in the acquirement of professional knowledge in recognised hospitals or schools, and that not less than three winter and three summer sessions thereof, have been passed in one or more of such hospitals in London. That he has studied Anatomy and Physiology by attendance on Lectures and Demonstrations, and by Dissections, during three winter sessions of not less than six months each, at a recognised school or schools. That he has attended Lectures on the Theory and Practice of Medicine, and on Clinical Medicine; and also on the Theory and Practice of Surgery and on Clinical Surgery, during two sessions of not less than six months each, at recognised schools and hos-

pitals. That he has attended one course of Lectures on each of the following subjects, viz.: Chemistry, Materia Medica, Midwifery, with attendance on cases, Medical Jurisprudence, and Comparative Anatomy, at one or more recognised school or schools. That he has attended the Surgical Practice of a recognised hospital or hospitals during four winter and four summer sessions, and the Medical Practice of a recognised hospital or hospitals during one winter and one summer session. And that he has served the office of House-Surgeon or Dresser in a recognised hospital in the United Kingdom. He is also required to present Clinical Reports with observations thereon of six Surgical Cases taken by himself at one or more recognised hospital or hospitals in the United Kingdom, with satisfactory evidence of their authenticity and genuineness. 2. In the case of a candidate who has taken by examination the Degree of Bachelor or Master of Arts in any University in the United Kingdom, it will be sufficient to produce a certificate that he has been engaged for five years (instead of six years) in the acquirement of professional knowledge in recognised hospitals or schools, but in all other respects he must produce the certificates of the foregoing course of study. 3. Any person who was a Member of the College on the 14th September, 1844, will be admitted to examination for the Fellowship, upon the production of a certificate signed by three Fellows, that he has been eight years in the practice of the profession of Surgery, and that he is a fit and proper person to be admitted a Fellow, if upon examination he shall be found qualified. 4. Any person who shall have become a Member of the College after the said 14th of September, 1844, will, after the expiration of twelve years from the date of the diploma, be admitted to examination for the Fellowship upon the production of a certificate, signed by three Fellows, that he has been for twelve years in the practice of the profession of Surgery, and that he is a fit and proper person to be admitted a Fellow, if, upon examination, he shall be found qualified. The Preliminary Examination in Classics, Mathematics, and French, is held in the months of April and October; to which candidates are admitted upon having completed the eighteenth year of their age, and on the payment of the fee of ten guineas. The Professional Examination is held in the months of May and November, and occupies two days, either successive, or at such interval as the Court of Examiners may appoint. The subjects of the first day's examination are Anatomy and Physiology; those of the second day, are Pathology, Therapeutics, and Surgery; the candidate has to perform dissections or operations on the dead body. Graduates in Medicine of any University in the United Kingdom, will be admitted to the Fellowship of this College after having passed the Professional Examination in Surgery only; provided that the educational and other requirements of such Graduates, by the Universities in question, be deemed equivalent to those imposed on the candidates for the Fellowship of this College.* A candidate, whose qualifications shall be found insufficient upon his Professional Examination, will not be allowed to present himself a second time, until after the expiration of one year from such examination.

CANDIDATES FOR THE CERTIFICATE OF QUALIFICATION IN MIDWIFERY.

1. Persons who were Fellows or Members of the College prior to the 1st day of January, 1853, will be admitted to examination for the certificate of qualification in Midwifery, upon producing their diploma.
2. Persons having become Members of the College subsequently to the

* The Universities of Oxford, Cambridge and London, are recognised with reference to the foregoing regulation.

1st of January, 1853, will be admitted to examination on producing their Diploma, together with a certificate or certificates of having attended twenty Labours. 3. Members or Licentiates of any legally constituted College of Surgeons in the United Kingdom, and Graduates in Surgery of any University requiring residence to obtain Degrees, and recognised by this College, will also be admitted to examination on producing, together with their Diploma, Licence, or Degree, proof of being twenty-one years of age; of having been occupied four years in the acquirement of professional knowledge; of having attended one course of Lectures on Midwifery; and of having attended not less than twenty Labours. 4. Graduates in Medicine of any legally constituted College or University requiring residence to obtain Degrees, and recognised by this College, will also be admitted to examination on producing, together with their Diploma or Degree, proof of being twenty-one years of age; of having been occupied four years in the acquirement of professional knowledge; of having attended one course of Lectures on Midwifery; and of having attended not less than twenty Labours. 5. Persons having commenced their professional education, either by attendance on Hospital Practice, or on Lectures on Anatomy, prior to the 1st of January, 1853, will be admitted to examination, on producing the several certificates of professional education required for admission to examination for the Diploma of Member of the College at the period of such commencement of professional education. 6. Persons having commenced their professional education, either by attendance on Hospital Practice or on Lectures on Anatomy, after the said 1st of January, 1853, will be admitted to examination on producing certificates of being twenty-one years of age; of having been engaged during four years in the acquirement of professional knowledge; of having completed, at recognised schools, the professional education required of candidates for the Diploma of Member of the College; of having attended one course of Lectures on Midwifery and the Diseases of Women and Children; and of having personally conducted thirty Labours.

N.B.—The fee for the certificate is as follows, viz.:—1. Persons who were Fellows or Members of the College prior to the 1st of January, 1853, two guineas. 2. Persons admitted Fellows or Members of the College subsequently to the 1st of January, 1853, three guineas. 3. Persons producing any other Diploma or Certificate of Degree, which may be considered by the Council to afford satisfactory proof of sufficient surgical and medical education, three guineas. 4. All other persons, ten guineas. Candidates found not qualified will be referred for a period of not less than three months, and are required, upon again appearing before the Board, to produce a certificate of having personally conducted at least ten Labours subsequently to the date of such reference.

CANDIDATES FOR THE CERTIFICATE OF QUALIFICATION IN DENTAL SURGERY.

1. Candidates are required to produce the following certificates:—
 1. Of being twenty-one years of age. 2. Of having been engaged during four years in the acquirement of professional knowledge. 3. Of having attended at a school or schools recognised by this College, not less than one of each of the following courses of Lectures, delivered by lecturers recognised by this College, namely:—Anatomy, Physiology, Surgery, Medicine, Chemistry, and Materia Medica. 4. Of having attended a second winter course of Lectures on Anatomy, or a course of not less than twenty Lectures on the Anatomy of the Head and Neck, delivered by lecturers recognised by this College. 5. Of having performed Dissections at a recognised school during not less than nine months. 6. Of having completed a course of Chemical manipulation, under the superintendence of a teacher or lecturer recognised by this College. 7. Of having attended at a recog-

nised hospital or hospitals in the United Kingdom, the Practice of Surgery and Clinical Lectures on Surgery during two winter sessions. 8. Of having attended at a recognised school, two courses of lectures upon each of the following subjects. viz. :—Dental Anatomy and Physiology (Human and Comparative), Dental Surgery, Dental Mechanics, and one course of Lectures on Metallurgy, by lectures recognised by this College. 9. Of having been engaged, during a period of not less than three years, in acquiring a practical familiarity with the details of Mechanical Dentistry, under the instruction of a competent practitioner. 10. Of having attended at a recognised Dental Hospital, or in the dental department of a recognised general hospital, the practice of Dental Surgery during two winter and two summer sessions.

N.B.—The students of the London schools are required to register the above certificates at this College; and special returns will be required from the provincial schools. The fee for the certificate of fitness to practise as a dentist is ten guineas, over and above any stamp duty. Members of the College will be examined only by the section of the Board consisting of persons skilled in Dental Surgery. A candidate whose qualification shall be found insufficient, will be referred back to his studies, and will not be admitted to re-examination within the period of six months, unless the Board shall otherwise determine.

THE SOCIETY OF APOTHECARIES.

Blackfriars, London, E.C. (Chartered 1616.)

REGULATIONS.

Every candidate for a Certificate of Qualification to practise as an Apothecary will be required to produce testimonials—

1. Of having passed a Preliminary Examination in Arts as a test of general education. This examination must be passed before the commencement of *Professional Studies*, which is defined by the Medical Council "to be the time of commencing *studies* at a *Medical School*." 2. Of having served an apprenticeship or pupilage of not less than five years to a practitioner qualified by the Act of 1815. 3. Of having attained the full age of twenty-one years. As evidence of age, a copy of the baptismal register will be required in every case where it can possibly be procured. 4. Of good moral conduct. 5. And of having pursued a course of medical study in conformity with the regulations of the Court.

COURSE OF STUDY.

Every candidate whose attendance on lectures shall commence on or after the 1st of October, 1861, must attend the following lectures and medical practice during not less than four winter and four summer sessions; each winter session to consist of not less than six months, and to commence not sooner than the 1st nor later than the 15th of October; and each summer session to extend from the 1st of May to the 31st of July.

FIRST YEAR.—*Winter Session*—Chemistry; Anatomy and Physiology; Dissections. *Summer Session*—Botany; Materia Medica and Therapeutics; Practical Chemistry.

SECOND YEAR.—*Winter Session*.—Anatomy and Physiology, including Dissections and Demonstrations; Principles and Practice of Medicine; Clinical Medical Practice. *Summer Session*—Midwifery and Diseases of

Women and Children; Forensic Medicine and Toxicology; Clinical Medical Practice.

THIRD YEAR.—*Winter Session*—Principles and Practice of Medicine; Clinical Medical Lectures; Morbid Anatomy; Clinical Medical Practice. *Summer Session*—Practical Midwifery and Vaccination; Morbid Anatomy; Clinical Medical Practice.

REGISTRATION OF TESTIMONIALS.

All testimonials must be given on a printed schedule, and the blanks therein must be filled up by the lecturers themselves. Students will be supplied with schedules at the time of their first registration; in London, at the Apothecaries' Hall; in the provincial towns from the gentlemen who keep the registers of the medical schools, and whose names may be known on application to the Secretary of the Court. All students, in London, are required personally to register the several classes for which they have taken tickets, and those only will be considered as complying with the regulations of the Court, whose names and classes in the register correspond with their schedules. Tickets of admission to lectures and medical practice must be registered in the months of October and May. Due notice of the days and hours of such registrations will be given from time to time. The Court also requires students at the provincial medical schools to register their names in their own handwriting, with the registrar of each respective school, within the first fifteen days of October, and first fifteen days of May.

EXAMINATION IN ARTS.

An Examination in Arts will take place at the Hall three times in the year, viz., on the last Friday and Saturday in the months of January, April, and September. By order of the Medical Council, an Examination in Arts is compulsory on all gentlemen commencing their studies on or after the 1st of October, 1861, and must be passed previous to registration. Testimonials of proficiency in general education will be received, as exempting from the Examination in Arts at this Hall, from the national educational bodies, and also from any of the licensing bodies under the Medical Act of 1858.

PROFESSIONAL EXAMINATIONS.

The Court of Examiners meet in the hall every Thursday, where candidates are required to attend at a quarter before four o'clock. Every person intending to offer himself for examination must give notice in writing to the Clerk of the Society on or before the Monday previous to the day of examination, and must at the same time deposit all the required testimonials, and the fee, at the office of the beadle, where attendance is given every day, except Sunday, from ten until four o'clock, Saturday ten to two. The examination of candidates is divided into two parts, and is conducted partly in writing and partly *viva voce*. The first examination, which may be passed after the second winter session, embraces the following subjects: Latin, of the Pharmacopœia and Physicians' Prescriptions; Anatomy and Physiology; General and Practical Chemistry; Botany and Materia Medica. Second examination, after the third summer session (the five years' pupilage being completed): Practice of Medicine and Pathology; Midwifery, including the Diseases of Women and Children; Forensic Medicine and Toxicology. The Court of Examiners have determined that all Graduates in Medicine of the British University be in future admitted to a practical Examination in the Practice of Medicine and Midwifery only.

The examination of candidates for certificates of qualification to act as assistant, in compounding and dispensing medicines, will be as follows: In translating physicians' prescriptions and the Pharmacopœia Londonensis; in Pharmacy and Materia Medica.

By the 22nd section of the Act of Parliament, no rejected candidate can be re-examined until the expiration of six months from his former examination; and no rejected candidate as an assistant until the expiration of three months.

FEES.—For a certificate of qualification to practise, six guineas; for an assistant's certificate, two guineas.

STUDENTS' PRIZES.

The Society of Apothecaries annually offer two prizes for proficiency in the knowledge of Botany, and also two prizes for proficiency in the knowledge of Materia Medica and Pharmaceutical Chemistry. The prizes consist of a gold medal awarded to the candidate who distinguishes himself the most in the examination, and of a silver medal, and a book, to the candidate who does so in the next degree. The Examination in Botany will be held at the Society's Hall on the second Wednesday in August, at ten in the forenoon, and will be conducted by printed papers and *vivâ voce* questions. Each gentleman intending to compete for these prizes must send a written notice of his intention to the Beadle, on or before the first day of August, which notice must be accompanied by evidence of his having entered upon the second summer session of his medical studies, and by certificates from his teachers of his having attended their respective lectures and class examinations with diligence and regularity. The Examinations in Materia Medica and Pharmaceutical Chemistry will be held at the Hall of the Society on the third Wednesday, and on the following Friday, in October, from ten in the forenoon to one in the afternoon of each day, by printed papers on the Wednesday, and by *vivâ voce* questions on the Friday. Each gentleman intending to compete for these prizes must send a written notice of his intention to the Beadle on or before the seventh day of October, which notice must be accompanied by evidence of his having entered upon the third winter session of his medical studies, and by certificates from his teachers of his having attended their respective lectures and class examinations with diligence and regularity.

METROPOLITAN HOSPITALS AND SCHOOLS OF MEDICINE.*

ST BARTHOLOMEW'S HOSPITAL.

West Smithfield, E.C.

This hospital, which is the largest of the metropolitan hospitals, was founded in the year 1123, by Rayhere, minstrel to Henry the First, in connexion with the church and priory of St. Bartholomew, which also

* For much of the matter which follows we are indebted to the calendars, &c., published in connection with the various medical schools, and to the private information afforded by the honorary secretaries of these institutions. We gladly avail ourselves of this opportunity to express our best thanks for the generally prompt courtesy and assistance kindly rendered to us during the preparation of the Students' Number.

owed their origin to his munificence. At the suppression of monasteries in 1537, the priory and hospital, and their revenues, came into the possession of Henry VIII., who, ten years subsequently, upon the petition of Sir Richard Gresham, then Lord Mayor of London, re-founded the hospital by royal charter, and endowed it with the greater portion of its former revenues. At this period the hospital contained 100 beds, and its medical staff consisted of a physician and three surgeons. The immediate superintendence of the hospital was committed to Thomas Vicary, who held the post of Serjeant-Surgeon to Henry VIII., and the three successive sovereigns, and wrote *The Englishman's Treasure*, which was the first anatomical treatise published in the English language. Harvey, who immortalised his name by the discovery of the circulation of the blood, was appointed physician to the hospital in 1609, and held the office during the long period of thirty-four years. No record exists of the date at which the medical school of St. Bartholomew was commenced, but we find it stated that in 1662 students were in the habit of attending the medical and surgical practice of the hospital. Five years after this date, a library was formed for the use of the students and others, and in 1724, a new building was provided for a museum of anatomical and surgical preparations. In 1734, leave was granted for any of the surgeons "to read lectures in anatomy in the dissecting-room of the hospital." The first surgeon who availed himself of this permission was Edward Nourse, whose courses consisted, as shown by the Syllabus, of twenty-three lectures each. These lectures on anatomy were followed, in 1765, by the commencement of lectures on surgery by Percival Pott; and about the same time, Dr. William Pitcairn, physician to the hospital, began to give occasional lectures on medicine. Abernethy, who was elected assistant-surgeon to St. Bartholomew in 1787, gave an additional impulse to its medical school, and the crowd of students attracted by his high reputation as a teacher rendered it necessary to erect a new and larger anatomical theatre. Numerous additions have more recently been made to the buildings used for the purposes of medical education, by the enlargement of the anatomical museum, and the erection of new medical and chemical theatres and museums of *materia medica* and botany. A college for the reception of resident pupils was founded in 1843.

The hospital now contains 650 beds; of these 227 are allotted to the medical cases, 20 to the diseases of women, 322 to the surgical and ophthalmic cases, and 81 to the syphilitic. In the year 1863, relief was afforded to 5,655 in-patients, 20,188 out-patients, and 105,990 casualties, besides about 1,200 women attended in their confinements at their own homes.

Phys., Drs. Farre, Jeaffreson, Black, and Kirkes. *Surgs.*, Messrs. Lawrence, Wormald, Paget, and Coote. *Asst.-Phys.*, Drs. Martin, Edwards, and Andrew. *Asst.-Surgs.*, Messrs. Holden, Savory, Callender, and J. Smith. *Phys.-Acc.*, Dr. Greenhalgh. *Apoth.*, Mr. Wood.

One of the assistant-physicians sees the medical out-patients daily, between eleven and two; and one of the assistant-surgeons sees the surgical out-patients daily, between twelve and two. The casualty patients are seen at all hours in the surgery by the apothecary, house-surgeons, and dressers. Surgical operations on Saturday, at half-past one. The physicians and surgeons deliver clinical lectures weekly, during both the winter and the summer sessions. A record of all important cases is kept, under the superintendence of a Registrar. Inspections of morbid anatomy, in the pathological theatre, as opportunities offer—of the medical cases, by Dr. Andrew; of the surgical cases, by the house-surgeon, under the superintendence of the surgeons.

LECTURES: WINTER SESSION.

Medicine.—Drs. P. Black and Kirkes. One course, 5*l.* 5*s.* ; unlimited, 7*l.* 7*s.*

Surgery.—Mr. W. Lawrence, and Mr. Coote. One course, 5*l.* 5*s.* ; a second course, 3*l.* 3*s.* ; unlimited, 7*l.* 7*s.*

Chemistry.—Dr. Odling. One course, 5*l.* 5*s.* ; unlimited, 7*l.* 7*s.*

Descriptive and Surgical Anatomy.—Mr. F. C. Skey and Mr. L. Holden. Half session, 5*l.* 5*s.* ; whole session, 7*l.* 7*s.* ; unlimited, 10*l.* 10*s.*

General Anatomy and Physiology.—Mr. W. S. Savory. One course, or half session, 5*l.* 5*s.* ; whole session, 7*l.* 7*s.* ; unlimited, 10*l.* 10*s.*

Superintendence of Dissections.—Messrs. Callender and Smith.

The dissecting-rooms are open daily, from seven o'clock till four. The entrance to the lectures on Anatomy, or to those on Physiology, confers the right of dissecting.

LECTURES: SUMMER SESSION.

Materia Medica and Therapeutics.—Dr. Farre. One course, 4*l.* 4*s.* ; unlimited, 6*l.* 6*s.*

Midwifery and the Diseases of Women and Children.—Dr. Greenhalgh. One course, 5*l.* 5*s.* ; unlimited, 6*l.* 6*s.*

Botany.—Dr. F. Harris. One course, 3*l.* 3*s.* ; unlimited, 4*l.* 4*s.*

Forensic Medicine.—Dr. R. Martin. (The Lectures on Toxicology, by Dr. Odling). One course, 3*l.* 3*s.* ; unlimited, 4*l.* 4*s.*

Practical Chemistry.—Dr. Odling. One course, 2*l.* 2*s.* ; unlimited, 3*l.* 3*s.*

Comparative Anatomy.—Mr. Callender. One course, 2*l.* 2*s.* ; unlimited, 3*l.* 3*s.*

Demonstrations of Operative Surgery.—Messrs. Callender and Smith. Fee for the course, 2*l.* 2*s.*

Demonstrations of Morbid Anatomy.—Dr. Andrew.—*Tutor*, Mr. Francis Lloyd.

HOSPITAL PRACTICE.—Fees for Attendance.

Entrance fee to all the lectures required for the Licentiate Examinations at the College of Physicians and for the Members' Examination at the Royal College of Surgeons and the Society of Apothecaries, fifty guineas.

Entrance fee to all the lectures and hospital practice required for the same Examinations, ninety-five guineas.

Unlimited entrance to all the lectures, sixty guineas.

The entrance fee to all the lectures and hospital practice may be paid in three portions, as follows : at the beginning of first winter session, thirty guineas ; of the first summer session, thirty guineas ; and of the second winter session, thirty-five guineas.

Students having entered for any period to the hospital practice or lectures, may prolong their attendance, on paying the difference between their first entrance fee and that for any longer period.

Medical Practice.—Six months, 12*l.* 12*s.* ; two years, 18*l.* 18*s.* ; unlimited, 26*l.* 5*s.* The clinical clerks to the physicians and the midwifery assistant are elected from the most diligent students.

Surgical Practice.—Six months, 15*l.* 15*s.* ; twelve months, 21*l.* ; unlimited, 26*l.* 5*s.* *Dresserships*, three months, 12*l.* 12*s.* ; six months, 18*l.* 18*s.* ; twelve months, 26*l.* 5*s.*

The entrance to the Medical or Surgical Practice confers the right of attending the courses of clinical lectures by the Physicians or Surgeons.

In addition to the instruction given by all the medical officers at their visits, courses of clinical lectures are delivered weekly during both the

Winter and the Summer Sessions—on *Medicine*, by Drs. Farre, Black, and Kirkes; on *Surgery*, by Messrs. Lawrence, Paget, and Coote; and on *Midwifery and Diseases of Women and Children*, by Dr. Greenhalgh.

The Examinations after Death are made in the Pathological Theatre, at twelve o'clock, by Dr. Andrew, Demonstrator of Morbid Anatomy.

Surgical Operations on Saturdays, at half-past one o'clock.

Cases in Midwifery are attended, as out-patients of the hospital, by the students of the Midwifery Class, under the superintendence of the Physician-Accoucheur. About 1,200 cases are thus attended annually.

The Attendance on Lectures of all students is registered. All students preparing for examination at the College of Surgeons, are examined three times a week, by the teachers of Anatomy. All students of the first year are examined weekly in the several subjects of their studies by the Tutor; and all students preparing for examination at the College of Physicians, or at the Apothecaries' Hall, are also examined by the Tutor. Students preparing for the Universities may also be examined by the Tutors.

Instruction in Practical Pharmacy and in Vaccination is given under the direction of Mr. Wood.

The Museums of Anatomy, Materia Medica, and Botany, are open daily to the students of the respective classes.

The Reading Rooms are open to all students of the school during the greater part of the day.

The Library contains upwards of 5,000 volumes of the standard works on Medical and other sciences, with the chief Medical Journals, which are circulated among the subscribers. Subscription, for twelve months, 1*l.* 1*s.* 6*d.*; for four years, 2*l.* 2*s.*

Collegiate Establishment.—Under the direction of the Treasurer and a Committee of the Governors of the hospital, houses within the hospital have been fitted up as a college, for the residence of forty students.

The establishment is under the superintendence of Dr. Andrew, Fellow of Wadham College, Oxford, from whom the rules may be obtained.

SCHOLARSHIPS.—In April, 1865, one of the value of 50*l.* Subjects of examination—Medicine, Surgery, and Materia Medica; one of the value of 25*l.*—Medicine, Surgery, and Materia Medica; one of the value of 50*l.*—Anatomy, Physiology, and Chemistry; one of the value of 25*l.*—Anatomy, Physiology, and Chemistry. In July, 1865, one of the value of 50*l.*, one of the value of 30*l.*, and one of the value of 20*l.*—Anatomy, Physiology, Chemistry, Botany, and Materia Medica.

FOUNDATION AND OTHER PRIZES.—*The Treasurer's Prize*, given by Mr. W. Foster White, will be awarded to the student of the first year who shall make the best dissection, and pass the best practical examination in Anatomy.

The Foster Prize, founded by Mr. George Holgate Foster, for the encouragement of Practical Anatomy, will be given to the student of the second year who shall display the greatest industry and skill in the dissecting-rooms.

The Bentley Prize, founded by Dr. James Bentley, late Treasurer of the hospital, will, in 1865, be given for the best report of surgical cases observed in the hospital during the previous year.

The Hichens Prize, founded by Robert Hichens, will be given to the Student who passes the best examination in Bishop Butler's "Analogy of Natural and Revealed Religion."

The Wix Prize, founded by the Rev. Samuel Wix, Vicar and Hospitaller of St. Bartholomew's will be awarded for the best Essay on "The Connection between Revealed Religion and Medical Science." Essays must be presented to the Rev. W. Mitchell, at his residence in the Hospital, on or before the 1st March, 1865.

* * Further information, in regard to every department of the College,

may be obtained from Dr. Edwards, Mr. Callender, or any of the Medical or Surgical Officers or Lecturers; or by inquiry at the Anatomical Museum or the Library.

CHARING-CROSS HOSPITAL.

Charing-Cross, W.C.

The present building was commenced in 1831, as a portion of the West Strand Improvements, when the first stone was laid, with the customary Masonic ceremonials, by the Duke of Sussex, Grand Master of the Freemasons. The Charity, which was founded in 1818, was the eighth established in the metropolis, the population of which had doubled since the seventh had been instituted.

Phys., Drs. Chowne and Willshire.—*Asst.-Phys.*, Dr. Salter and Headland.—*Surgs.*, Messrs. Hancock and Canton.—*Asst. Surgs.*, Messrs. Hird and Barwell.—*Dentist*, Mr. Roberts.—*Dispenser*, Mr. Whitney.—*Sec.*, Mr. H. Woolcott.

WINTER SESSION.

Principles and Practice of Medicine.—Drs. Chowne and Willshire. One session, 4*l.* 4*s.*; two sessions, 6*l.* 6*s.*; three sessions, 7*l.* 7*s.*

Physiology and Pathology.—Dr. H. Salter. One session, 4*l.* 4*s.*; two sessions, 6*l.* 6*s.*; three sessions, 7*l.* 7*s.*

Anatomy (Descriptive and Surgical).—Mr. Canton. One session, 4*l.* 4*s.*; two sessions, 6*l.* 6*s.*; three sessions, 7*l.* 7*s.*

Demonstrations and Dissections.—Dr. Goldsbro. One session, 2*l.* 2*s.*; two sessions, 4*l.* 4*s.*; three sessions, 5*l.* 5*s.*

Surgery.—Mr. Hancock. One session, 3*l.* 3*s.*; two sessions, 5*l.* 5*s.*; three sessions, 6*l.* 6*s.*

Chemistry.—Mr. C. W. Heaton. One session, 5*l.* 5*s.*; two sessions, 6*l.* 6*s.*; three sessions, 7*l.* 7*s.*

Natural Philosophy.—One course, 3*l.* 3*s.*

SUMMER SESSION.

Midwifery and the Medical Treatment of Women and Children.—Dr. Chowne. One session, 3*l.* 3*s.*; two sessions, 5*l.* 5*s.*; three sessions, 6*l.* 6*s.* Abundant opportunities are afforded to the advanced students of attending obstetrical cases.

Materia Medica and Therapeutics.—Dr. Steggall. One session, 3*l.* 3*s.*; two sessions, 5*l.* 5*s.*; three sessions, 6*l.* 6*s.*

Forensic Medicine.—Mr. Hird and Mr. Tuson. One session, 2*l.* 2*s.*; two sessions, 3*l.* 3*s.*; three sessions, 4*l.* 4*s.*

Botany.—One session, 2*l.* 2*s.*; two sessions, 3*l.* 3*s.*; three sessions 4*l.* 4*s.*

Practical Chemistry.—Mr. C. W. Heaton. One session, 2*l.* 2*s.*

Comparative Anatomy.—Mr. R. Barwell. One session, 3*l.* 3*s.*; three sessions, 4*l.* 4*s.*

HOSPITAL PRACTICE.

Medical Practice.—Three months, 6*l.* 6*s.*; six months, 10*l.* 10*s.*; full period required, 21*l.* *Surgical Practice*.—Three months, 6*l.* 6*s.*; six months, 10*l.* 10*s.*; full period required, 21*l.* Full period required by the Royal College of Surgeons and the Society of Apothecaries, to both medical and surgical practice, 26*l.* 5*s.* For a longer period, 5 guineas for each additional winter, and 3 guineas for each additional summer session.

The Physicians and Surgeons visit the wards on their respective days between one and two o'clock.

The cases in Out-patients' Department are seen and prescribed for at the hospital daily between twelve and two o'clock.

Clinical Lectures.—Medical and Surgical Clinical Lectures are given by the Physicians and Surgeons of the hospital, in accordance with the new regulations.

Morbid Anatomy.—Post-Mortem Examinations are made in available cases, and demonstrations given.

The Museum contains numerous instructive preparations of morbid and natural structure; together with models, drawings, diagrams, &c., for illustrating the various lectures.

Certificates of attendance on the practice at this hospital, and on the lectures at this school, are received as qualifying for Examination on the respective subjects by the University of London College of Surgeons, and Society of Apothecaries.

Demonstrations in Operative Surgery, applications of bandages, splints, and other mechanical means of cure, by Mr. Hancock.

Attendance is given in the dissecting-room by the teacher of Anatomy, and the demonstrator, Mr. Goldsbro.

General fee to matriculated students for all the lectures required by the College of Surgeons and Society of Apothecaries, for the full period required, and in the order of attendance prescribed by the latter, 4*l.* 2*s.* To the students are presented cards of admission to the library, renewable periodically. The matriculation fee is 2*l.* 2*s.*

Medical Tutor, T. W. Goldsbro, M.D. The duty of the Medical Tutor is to assist the students in the subjects of the lectures.

Diseases of the Eye.—Matriculated students are admitted free to the lectures upon the diseases of the eye, delivered by Mr. Hancock, at the Royal Westminster Ophthalmic Hospital, closely adjacent.

Microscopical Demonstrations, on healthy and diseased structures. Dr. Salter, the Lecturer on Physiology and Pathology, gives, in the summer, a short course of practical microscopical demonstrations, including the following subjects:—The principles of construction of the different forms of microscopes, and the manipulation of the instrument; the microscopical examination of the tissues, of the solids and fluids of the body, especially of the urine and other secretions, and of various morbid products; practical instructions in the different methods of preparing and mounting microscopical subjects as permanent specimens. Matriculated students are admitted free to this course.

The Library, containing numerous standard and medical surgical works, both ancient and modern, and supplied with the current medical periodicals, is open daily (Sunday excepted), from half-past nine a.m. till half-past four p.m., and is under the superintendence of the Librarian. The Library is furnished with a Cabinet of *Materia Medica*, and Osteological preparations. Recent specimens of Medical Botany are also supplied during the summer session.

The Chemical Laboratory is open daily under the immediate direction of the Professor of Chemistry, from ten o'clock till four, except on Saturdays, when it closes at one o'clock.

Free Scholarships.—Candidates for free scholarships are required to be the sons of professional men, or of gentlemen in a corresponding station of society, of reduced circumstances, and are to have had a good preliminary classical education fitting them for the medical profession. They are to send in their application and testimonials before the 1st of August. A printed form for that purpose will be supplied to them upon the written application of the candidates themselves, addressed to the Managers of the College.

The Medals and Testimonials of Honour are awarded in conformity with the following arrangements:—The competitors for the Governors' Clinical Medals are to have attended the medical and surgical practice of the hospital for the full period required to qualify for examination by the College of Surgeons and Society of Apothecaries. Competitors for the Silver Class Medals, and Testimonials of Honour, of the Senior Classes, are to be in the last session of their attendance in the classes for the medal or testimonials for which they are competitors. Competitors for the Bronze Medals, and Testimonials of Honour, of the Junior Classes, are to have completed, when the current session shall be ended, the first session of attendance, in the classes for the medal or testimonial for which they are competitors. In those classes of which only one session is required by the College of Surgeons and Society of Apothecaries, a Silver Medal is offered for competition instead of a Bronze Medal. Gentlemen having already competed successfully in one branch of study, are not entitled again to compete in that branch.

ST. GEORGE'S HOSPITAL.

Hyde-park Corner, S.W.

This institution originated in 1733, with a party of dissentient governors of the Westminster Hospital, who converted Lanesborough House, formerly the country house of the family from which it took its name, into an Infirmary. The original hospital only contained sixty beds, but the number in the present building, erected in 1831, is 350, of which 200 are allotted to surgical, and 150 to medical cases. The late Mr. Atkinson Morley left a large sum of money to St. George's Hospital, for the purpose of establishing a Convalescent Institution in connection with the hospital. The terms of the bequest are such that the money must be specially applied for this purpose, and not appropriated for the general fund of the hospital itself. The celebrated John Hunter held the office of Surgeon to St. George's from 1768 to 1793, when he died suddenly of disease of the heart in the hospital. Some melancholy circumstances attended his decease. He had long contested a matter of right with his colleagues, and having become excited at a meeting of the governors, on October 16, he felt ill, and retired to an adjoining room, where he fell lifeless into the arms of Dr. Robertson, one of the physicians to the hospital. Another medical celebrity connected with St. George's, was the late Sir B. C. Brodie, who held the office of Assistant-Surgeon for fourteen years, and that of Surgeon for nearly eighteen years. So devoted was he to his hospital duties, that he experienced considerable regret at relinquishing them, and, as he himself used to say, for a long time after his resignation, never passed by the hospital without something like a painful recollection that his labours there were at an end. The splendid museum at St. George's Hospital was founded on Sir B. Brodie's private collection.

Physicians. Drs. Page, Pitman, Fuller, and Barclay.—*Asst. Phys.*, Drs. Ogle and Wadham.—*Consulting Surgeons*, Messrs. C. Hawkins and Cutler.—*Surgeons*, Messrs. Tatum, Hewett, Pollock, and H. Lee.—*Asst. Surgeons*, Messrs. Holmes and Brodhurst.

Gentlemen may become perpetual pupils, and entitled to compete for all the prizes and appointments, by paying a compounding fee of one hundred pounds on entering the hospital.

Gentlemen becoming pupils of this hospital, who desire to be Members of the Royal College of Physicians, Royal College of Surgeons, or Licentiates of the Society of Apothecaries, may qualify themselves for examination on

paying a fee of ninety pounds ; one half of this fee may be paid at the commencement of the first winter session, and one half at the commencement of the second winter session.

This payment will admit the pupil to the office of Clinical Clerk and dresser for three months each, but not to the prizes or chief offices.

HOSPITAL PRACTICE.

MEDICAL.—For the period required to qualify for examination by the Royal College of Physicians, the Royal College of Surgeons, and Society of Apothecaries, 16*l.* 16*s.* ; for six months, 8*l.* 8*s.* ; for one year, 16*l.* 16*s.* ; perpetual pupils, 25*l.* 4*s.* ; fee to the apothecary, 1*l.* 1*s.*

SURGICAL.—For the period required to qualify for examination by the Royal College of Surgeons and Royal College of Physicians, 21*l.* ; for six months, 15*l.* 15*s.* ; for one year, 21*l.* ; for each additional year, 10*l.* 10*s.* ; perpetual pupils, 42*l.*

Attendance of the Physicians and Surgeons daily at one o'clock. Surgical operations on Thursday at one o'clock.

House Surgeons.—The appointment to these offices is made half-yearly from among the surgeons' perpetual pupils. The pupil selected assists the Curator for six months, and acts as Assistant House Surgeon for six months before his admission to the office of House Surgeon, which is tenable for twelve months.

Clinical Assistants.—Every pupil entering to the medical practice must hold the office of clinical assistant to one of the physicians, for a period of at least three months. Every pupil entering to the surgical practice must hold the office of clinical assistant to one of the surgeons for a similar period.

Dressers.—Pupils entering to the surgical practice must hold the office of dresser for a period of three months, and perpetual pupils will have the privilege of holding the office of dresser for two periods of three months each. The dresser of the surgeon of the week boards at the hospital free of expense.

Clinical Lectures are given by the physicians and surgeons of the hospital during the winter and summer sessions.

Clinical Instruction will be given by the physicians and surgeons to a limited number of pupils for at least three months consecutively.

A Maternity Department, for the delivery of married lying-in women at their own homes, is established at the hospital, and a ward is devoted for the reception of women suffering under diseases peculiar to the sex.

Obstetric Assistant.—This officer must be a legally qualified practitioner ; he is appointed for twelve months, and is eligible for re-appointment at the end of that period. He resides and boards in the hospital, and receives a yearly salary of one hundred pounds.

Vaccination will be performed every Thursday morning at ten o'clock, and instruction in Vaccination given by the Obstetric Assistant.

Dental Surgery.—Mr. Vasey will deliver a course of lectures on Dental Surgery during the summer session. Fee to pupils (not being pupils of the hospital), 1*l.* 1*s.*

The Library and Reading-Room are open during the greater part of the day. Each pupil of the hospital has to subscribe the sum of 10*s.* 6*d.* to the library, at the commencement of each winter session.

The Museum is open daily to the pupils of the hospital.

Curator of the Pathological Museum.—A curator is appointed annually by the weekly board, on the recommendation of the Medical School Council, with a salary of 50*l.* per annum.

Registrars.—Two registrars are appointed annually by the weekly board,

on the recommendation of the Medical School Council, each with a salary of 20*l.* per annum.

WINTER SESSION.

Descriptive and Surgical Anatomy.—Messrs. Holmes and Rouse. Course, 6*l.* 6*s.* Perpetual, 8*l.* 8*s.*

Physiology, General and Comparative Anatomy.—Dr. William Ogle. Course, 6*l.* 6*s.* Perpetual, 8*l.* 8*s.*

Practical Anatomy.—A regular series of demonstrations of certain structures of the body will be given by the demonstrators, Mr. Freeman, and Mr. T. Edgelow, who will likewise assist the students in their studies.

Pathology.—During winter session, by Mr. Ogle; and during summer session, by Mr. H. Lee.

Theory and Practice of Medicine.—Dr. Pitman. 6*l.* 6*s.*

Theory and Practice of Surgery.—Mr. Tatum. Course, 4*l.* 4*s.* Perpetual, 6*l.* 6*s.*

Morbid Anatomy.—Instruction in morbid anatomy is given by the physicians and surgeons in the pathological theatre of the hospital as opportunities occur.

Chemistry.—Dr. H. M. Noad. Course, 6*l.* 6*s.* Perpetual, 8*l.* 8*s.*, including twelve lectures on physiological chemistry, by Dr. E. Harvey.

Scale of Fees for practical instruction, to be paid on entrance), including the use of apparatus and materials, excepting platinum and silver, and their salts, which are found by the students. For every day in the week, from October 1st to March 31st, 18*l.* 18*s.*; for four days in the week, 15*l.* 15*s.*; for three days, 12*l.* 12*s.*; for two days, 10*l.* 10*s.*; for one day, 8*l.* 8*s.*; for one month (every day in the week), 5*l.* 5*s.*; for one month (four days in the week), 4*l.* 4*s.*; for one month (three days in the week), 3*l.* 3*s.*

SUMMER SESSION.

Practical Chemistry.—Fee, including the use of materials, 4*l.* 4*s.*

Midwifery and Diseases of Women and Children.—Dr. R. Lee. 6*l.* 6*s.*

Materia Medica.—Dr. Barclay. Course, 5*l.* 5*s.* Perpetual, 6*l.* 6*s.*

Medical Jurisprudence.—Dr. Fuller. Course, 3*l.* 3*s.* Perpetual, 4*l.* 4*s.*

Botany.—Mr. M. T. Masters. Session, 3*l.* 3*s.*; Perpetual, 4*l.* 4*s.*

EXHIBITIONS AND PRIZES.

"The William Brown Exhibition" of 40*l.* per annum tenable for three years.—This exhibition was founded by the widow of William Brown, Esq., formerly a pupil of St. George's Hospital, to be competed for by perpetual pupils who have commenced their third but not completed their fourth winter session. It will be "bestowed on the candidate who shall show the best general fitness for the exercise of the medical profession, and whose moral conduct shall in all respects be satisfactory." This exhibition was last awarded in March, 1863.

The Thompson Medal.—Mr. Sergeant Thompson, who was for many years treasurer of St. George's Hospital, invested the sum of 100*l.*, three per cent. stock, in the names of trustees, for the purchase of a silver medal annually, to be awarded for the best clinical report of medical and surgical cases observed in the hospital during the preceding twelve months. The cases are to be accompanied by observations, and are not to exceed twenty in each department.

Sir Charles Clarke's Prize for Good Conduct.—Sir Charles Clarke, Bart., M.D., formerly a pupil of St. George's Hospital, left the sum of 200*l.* consols, the interest of which was to be awarded annually to the student of the hospital "who, by reason of his general good conduct during the preceding year, should be considered the most deserving."

Sir Benjamin Brodie's Clinical Prize in Surgery will be awarded to the perpetual pupil of the hospital who shall have delivered to the surgeons the best report of not more than twenty surgical cases, which have occurred in the hospital during the preceding twelve months, each case being accompanied with notes illustrative of its pathology, diagnosis, and treatment.

The Lewis Powell Clinical Prize in Medicine will be awarded to the Perpetual Pupil of the hospital who shall produce the best report of not more than twenty medical cases, which have occurred in the hospital during the preceding twelve months. Each case to be accompanied by observations.

The Henry Charles Johnson Memorial Prize in Anatomy will be awarded to that pupil who shall exhibit the greatest proficiency in Practical Anatomy.

General Proficiency Prizes.—At the close of the summer session, a general examination of all the pupils will be held, when a certificate of proficiency will be given to each one who passes to the satisfaction of the Examiners, and the following prizes awarded to the most distinguished, viz. :—

To pupils in their first year, ten guineas ; the examination to be in Anatomy, Physiology, Chemistry, and Botany.

To pupils in their second year, ten guineas ; the examination to be in Anatomy, Physiology, Chemistry, and Materia Medica.

To pupils in their third year, ten guineas ; the examination to be in the Principles and Practice of Medicine and Surgery, Pathology, and Midwifery.

* * Further information may be obtained from Dr. Barclay, the Treasurer of the school, from any of the lecturers, or from Mr. Hammerton, at the hospital.

GUY'S HOSPITAL.

St. Thomas's Street, Borough, S.E.

This hospital was built in 1722-24, at the sole expense of Thomas Guy, a bookseller in the City of London, who amassed a large fortune in business, and afterwards greatly increased it by investing in the South-Sea Company. He had agreed to marry his housekeeper, but she happened to displease him, and he thenceforth devoted his immense fortune to charitable purposes. In 1707 he built and furnished three wards of St. Thomas's Hospital, and, at a subsequent period, he took a piece of ground, situated on the south side of their hospital, from the Governors of St. Thomas's, at a ground-rent of 30% yearly for 999 years, and here he built a hospital rivalling in size the older institution. The expense of erecting the hospital, which bore his name, was nearly 19,000%, and the sum which he left to endow it was 219,000%, the largest amount ever left by an individual for charitable uses.

In 1829, Mr. Hunt, of Petersham, further enriched Guy's Hospital by a legacy of 196,000%, stipulating for the accommodation of 100 additional patients. The annual income of the hospital is stated, in Low's "Charities of London," to be nearly 30,000%, arising chiefly from estates purchased with the valuable bequests of Guy and Hunt, in the counties of Essex, Hereford, and Lincoln. The building consists of a centre and two wings, having a garden at the back for the recreation and exercise of the patients. The hospital now contains 600 beds, and is divided into medical, surgical, clinical, ophthalmic, uterine, and venereal wards, with additional rooms for special cases.

Phys., Drs. G. H. Barlow, O. Rees, and W. W. Gull.—*Asst.-Phys.* Dr. S. O. Habershon, S. Wilks, and F. W. Pavy.—*Surgs.*, Messrs. E. Cock, J. Hilton, J. Birkett, and A. Poland.—*Asst.-Surgs.*, J. C. Forster, T. Bryant, and A. Durham.—*Obst. Phys.*, Dr. H. Oldham.—*Asst. Obst. Phys.*, Dr. J. B. Hicks.—*Surg.-Dentist*, Mr. J. Salter.—*Apoth.*, Mr. J. Stocker.—*Cons. Ophth. Surg.*, Mr. J. F. France.—*Ophth. Surg.*, Mr. A. Poland.—*Asst. Ophth. Surg.*, Mr. C. Bader.

Gentlemen desirous of becoming students, must produce satisfactory testimony as to their education and conduct.

Fee for Hospital Practice and Lectures.—First year, 40*l.*; second year, 40*l.*; and 10*l.* for every succeeding year of attendance. One payment of 100*l.* entitles a student to a perpetual ticket.

WINTER SESSION.

Medicine.—Drs. Rees and Gull.

Clinical Medicine.—Drs. Barlow, Rees, and Gull.

Surgery.—Messrs. Birkett and Poland.

Clinical Surgery.—Messrs. Cock, Hilton, Birkett, and Poland.

Anatomy, Descriptive and Surgical.—Messrs. C. Forster and Durham.

Physiology and Microscopic Anatomy.—Dr. Pavy.

Demonstrations on Anatomy.—Dr. Moxon; Mr. Bankart; and C. H. Fagge, M.B.

Demonstrations on Morbid Anatomy.—Dr. Wilks.

Clinical Lectures on Midwifery and Diseases of Women.—Drs. Oldham and Hicks.

Chemistry.—Dr. A. S. Taylor.

Experimental Philosophy.—Dr. C. H. Fagge.

Lying-in-Charity.—Drs. Oldham and J. B. Hicks.

Curator of Museum.—Dr. Wilks.

SUMMER SESSION.

Demonstrations on Cutaneous Diseases.—Dr. Habershon.

Materia Medica.—Dr. Habershon.

Clinical Medicine.—Drs. Habershon, Wilks, and Pavy.

Clinical Surgery. Messrs. J. C. Forster, Bryant and Durham.

Midwifery.—Dr. Oldham and Dr. B. Hicks.

Medical Jurisprudence.—Dr. A. S. Taylor.

Ophthalmic Surgery.—Mr. A. Poland and Dr. Bader.

Pathology.—Dr. Wilks.

Dental Surgery.—Mr. Salter.

Vaccination.—Dr. Hicks.

Comparative Anatomy and Zoology.—Drs. Pavy and Moxon.

Practical Use of the Microscope.—Mr. Durham.

Botany.—Mr. Johnson.

Practical Chemistry.—Mr. Stevenson.

Demonstrations on Surgery.—Mr. Bryant.

Registrars.—*Medical*, Dr. Moxon; *Surgical*, Mr. Durham.

The Library, Museums, and Model-rooms, are open daily to the students.

PUPILS' APPOINTMENTS AND PRIZES.—House-Surgeons, Dressers, Assistant-Dressers, Dressers in the Eye-wards, Clinical and Obstetric Clerks, are selected according to merit, from students. The resident House-Surgeon is appointed every six months, from those students who have obtained the College Diploma.

Six Scholarships, varying in value from 25*l.* to 40*l.* each, will be awarded at the close of each summer session for general proficiency; also a Gover-

nor's prize of 10*l*. *Two Gold Medals* will be given by the Treasurer, one for Medicine and one for Surgery. *A Voluntary Examination* will take place at the entrance of pupils upon their studies, in Elementary Classics and Mathematics, and prizes will be given.

There are two Theatres; Anatomical, Pathological, and Comparative Anatomy Museums, Model-room, Dissecting-room, Materia Medica Museum, Chemical Laboratory, and Library.

The Museum of Human Anatomy is divided into an Anatomical and a Pathological department, under the care of the Curator, Dr. Wilks. The Anatomical department contains nearly 2,000 different preparations of the organs and tissues.

The Museum of Comparative Anatomy contains 2,500 specimens.

The Library contains upwards of 5,000 volumes, and is well supplied with periodicals.

Mr. Stocker, Apothecary to Guy's Hospital, is authorised to enter the names of students.

KING'S COLLEGE.

Strand, W.C.

WINTER SESSION.

Anatomy, Descriptive and Surgical.—Prof. R. Partridge; *Demonst.*, Mr. John Wood. Sessional Course, 6*l*. 6*s*. Unlimited, 9*l*. 9*s*.

Physiology—General and Morbid Anatomy.—Dr. L. S. Beale. 6*l*. 6*s*. and 9*l*. 9*s*.

Chemistry.—Dr. W. A. Miller; *Demonst.*, Mr. E. A. Hadow. 7*l*. 7*s*. and 9*l*. 9*s*.

Principles and Practice of Medicine.—Dr. G. Johnson. 7*l*. 7*s*.

Principles and Practice of Surgery.—Prof. W. Fergusson. 5*l*. 5*s*. and 7*l*. 7*s*.

SUMMER SESSION.

Botany.—Prof. W. R. Bentley. 3*l*. 3*s*. and 4*l*. 4*s*.

Materia Medica and Therapeutics.—Dr. A. B. Garrod. 4*l*. 4*s*. and 6*l*. 6*s*.

Midwifery and the Diseases of Women and Children.—Dr. W. O. Priestley. 6*l*. 6*s*.

Forensic Medicine.—Dr. W. A. Guy. 3*l*. 3*s*. and 4*l*. 4*s*.

Practical Chemistry.—Prof. C. L. Bloxham. 4*l*. 4*s*. and 8*l*. 8*s*.

Comparative Anatomy.—Prof. T. R. Jones. 3*l*. 3*s*. and 4*l*. 4*s*.

Dental Surgery.—Mr. S. Cartwright.

Sub-Dean and Med. Tutor.—Dr. Harley. The duty of this officer is to assist students in the subjects of their lectures, and to give attendance for two hours daily, for the purpose of conducting the business of the department.

KING'S COLLEGE HOSPITAL.

Portugal Street, Lincolns's Inn, W.C.

This hospital was established in 1839 for the sick poor, and for affording the means of practical instruction to the medical students of King's College. The new hospital, built by subscription, was commenced in 1852.

Cons. Phys., Drs. T. Watson and R. Ferguson.—*Phys. for In-Patients*. Drs. G. Johnson, L. S. Beale, and A. B. Garrod.—*Phys. to Out-Patients*,

Dr. W. A. Guy—*Phys. Acc. and Phys. for Diseases of Women and Children*, Dr. W. O. Priestley.—*Assist.-Phys.*, Drs. C. Evans, A. B. Duffin, E. Liveing, W. S. Playfair, and E. E. Day.—*Surg. for In-Patients*, Messrs. W. Fergusson, and R. Partridge.—*Asst.-Surgs.*, Messrs. J. Wood, H. Smith, F. Mason, and W. S. Watson.—*Surg.-Dent.*, Mr. S. Cartwright, jun.—*Disp.*, Mr. F. Blackburne.

Clinical Lectures are delivered by the Physicians and Surgeons.

MEDICAL OR SURGICAL PRACTICE.—Three months, 6*l* 6*s*. ; six months, 10*l*. 10*s*. ; one year, 15*l*. 15*s*. ; perpetual, 25*l*.

MEDICAL AND SURGICAL PRACTICE.—9*l*. 9*s*. ; 15*l*. 15*s*. ; 25*l*. ; and 35*l*. 15*s*. for three, six, and twelve months, and perpetual.

DENTAL PRACTICE.—5*l*. 5*s*.

The fees for admission to all the classes required by the Hall and College, both for lectures and hospital attendance, amount to 93*l*. 9*s*.

The fees for matriculation amount to 5*l*. 15*s*. 6*d*., and must be paid on entrance.

The Fees for Perpetual Admission to every course (except the Class of Analytical Chemistry and Dental Surgery), including the hospital, amount to 108*l*. 3*s*.

It is strongly recommended that the fee for attendance on the Medical Tutor's Class for one year be added:—Fee 3*l*. 3*s*.

The fees may be paid either in one sum on Matriculation, or in two equal sums, the one at the commencement of the first winter or summer session, the other after the first Christmas vacation, not later than January 21st, unless other arrangements are made at the time of entrance; but for full particulars respecting the payment of fees, see the "King's College Calendar."

Analytical and Experimental Chemistry.—Besides the chemical course and the summer class of Practical Chemistry, provision is made for those students who wish to become more minutely acquainted with certain subdivisions of the science. The class formed for this purpose is conducted in the laboratory, under the superintendence of the Professors and Demonstrator. By this means, each student will be enabled to familiarise himself with the methods of analysis and research. Attention is particularly given to Analytical and Agricultural Chemistry, and processes of manufacturing art. The fees for admission to the Laboratory Class are, for one month, 4*l*. 4*s*. ; for three months, 10*l*. 10*s*. ; for six months, 18*l*. 18*s*.

SCHOLARSHIPS.

A. Warneford Scholarships.—The sum of 200*l*. is set apart annually in consideration of 5,000*l*. presented to the College by the late Reverend S. W. Warneford, LL.D., for Scholarships to students of this department: viz. :—

Class I. "*For the Encouragement of the Previous Education of Medical Students*."—Two Scholarships of 25*l*. per annum for three years, are open to all new matriculated medical students at the beginning of their first winter session. Candidates are examined in Divinity, the Classics, English History, Mathematics, and the Modern Languages. An equal number of marks are assigned to each subject.

N.B.—In October, 1862, three extra Scholarships of 25*l*. each, for two years, were given.

Class II. "*For the Encouragement of Resident Medical Students*."—One Scholarship of 25*l*. per annum, for two years, is open to all second year matriculated medical students, who, during at least six months of their first academical year, and the whole of their second academical year, shall have resided within the limits of the College, and shall produce certain

specified certificates. Candidates are examined in divinity, and in the particulars of hospital practice.

B. College Scholarships. The Council of King's College give, at the close of each winter session, the following Scholarships to matriculated students of the Medical Department.

1. One of 40*l.* per annum, for two years, open to students of the third and fourth years.

2. One of 30*l.* per annum, for one year, open to students of the second year.

3. Three of 20*l.* per annum, for one year, open to students of the first year.

The subjects for these examinations (with the exception of Latin in the case of the Junior Scholarships), are wholly medical.

C. Daniell Scholarships.—This Scholarship has been founded in honour of the late Professor Daniell, and is open to every student of the College, whether matriculated or occasional. It is of the annual value of 20*l.*, tenable for two years; and is given every second year for the best series of researches in Chemistry made in the laboratory of the College since the last award.

D. Divinity Scholarship.—This Scholarship of 30*l.* is also open to matriculated students of this department.

PRIZES.

A. Leathes Prizes.—The interest of 300*l.*, bequeathed by the late P. H. Leathes, Esq., is applied in the purchase of a Bible and Prayer-Book, as annual prizes to the two medical students who shall be found most worthy of the same, for their proficiency in religious knowledge, and for their general good conduct.

B. Warneford Prizes.—The sum of 40*l.* is set apart annually in consideration of 1,000*l.* presented to the College by the late Rev. S. W. Warneford, LL.D., and is expended in the purchase of medals and books, as prizes to the two medical students who shall most distinguish themselves at an examination consisting of questions in—1. Any two branches of Medical Science taught in the College, to be selected by the candidates. 2. The Holy Scriptures. 3. Butler's Analogy. The first prize is of the value of 25*l.*, and the second of 15*l.*

Matriculated Students only can become candidates for the prizes A. and B., the examination for which takes place in October of each year.

C. Class Prizes and Certificates of Honour.—Prizes are awarded annually for proficiency in the several subjects of Anatomy, Physiology, Chemistry, Materia Medica, Surgery, Medicine, Midwifery, Botany, Forensic Medicine, Comparative Anatomy, and Practical Chemistry. These consist of books of the value of 3*l.*

Certificates of Honour are given to such students in each class as the respective Professors shall consider entitled to receive them.

Two Medical Clinical Prizes, one of 3*l.*, for the winter session, and the other of 2*l.*, for the summer session; and two surgical clinical prizes, of the same value, are given for the best examination upon the cases treated of in the hospital at the mid-day visit, and upon the subjects discussed in the clinical lectures delivered during the winter and summer sessions respectively.

All students, occasional as well as matriculated, will be admitted to contend for the class prizes C, under rules laid down as to the number of courses of lectures.

Associates of King's College.—At the end of each winter session, the Professors lay before the Council the names of those medical students whom they recommend to be elected Associates of King's College, London, on

account of general good conduct, regularity of attendance at the classes in the College and at the hospital, and professional acquirements.

By a regulation of the University of Edinburgh, three out of the four years of study required by that University for its degree of M.D. may be passed at King's College.

Residence of Students.—Rooms are provided within the walls of the College for the residence of a limited number of matriculated students. The Censor of the College lives within its walls, and to him is committed by the Council the superintendence of all resident students under academical discipline.

Dining Hall.—There is a dining hall in the College, for the accommodation of the resident students, and for such other students as may desire to avail themselves of it.

LONDON HOSPITAL.

Whitechapel Road, E.

The London Hospital was instituted in 1740, in a large, old mansion, in Prescott Street, Goodman's Fields. In 1758 it was incorporated, and the present hospital was built on "the Mount," Whitechapel Road. It contains 445 beds, of which 135 are allotted to medical, and 310 to surgical, cases. Of these 310 beds, about 190 are exclusively appropriated to cases of accident. In the year 1863, the hospital received 31,775 patients, of whom 4,164 were in-patients, and 27,611 out-patients. The accidents brought to the hospital during 1863 were 13,682, including 2,389 in-patients, and 11,286 out-patients. In connection with the Maternity Department, 451 women were delivered at their own residences during the past year.

The first stone of a new wing, which will probably accommodate 200 additional patients when it is completed, was laid by the Prince of Wales on July 4th, 1864.

Cons.-Surg., Mr. Luke.—*Phys.*, Drs. P. Fraser, H. Davies, and Parker.—*Asst.-Phys.*, Drs. A. Clark, Ramskill, Down, and J. H. Jackson.—*Surgs.*, Messrs. Adams, Curling, and Hutchinson.—*Asst.-Surgs.*, Messrs. Maunder, Couper, Little, and Rivington.—*Obst. Phys.*, Dr. Barnes.—*Surg.-Dentist*, Mr. Barrett.

General fee for attendance on the medical and surgical practice, qualifying for the examinations at the London University, Royal College of Surgeons, and Apothecaries' Hall, and for perpetual attendance on all the lectures, 88*l.* 4*s.*, payable in two instalments of 44*l.* 2*s.* each, at the commencement of the two first winter sessions of attendance. Perpetual fee to the lectures alone, 50*l.* A fee of 1*l.* 1*s.* is to be paid for instruction in vaccination. Students can make special entries to lectures or hospital practice.

WINTER SESSION.

Medicine.—Drs. Parker and Davies. One session, 5*l.* 5*s.*; unlimited, 6*l.* 6*s.*

Surgery.—Mr. J. Hutchinson. One session, 5*l.* 5*s.*; unlimited, 6*l.* 6*s.*

The lectures on Ophthalmic Surgery will be delivered by Mr. Hutchinson, in the summer session.

Descriptive and Surgical Anatomy.—Mr. J. Adams. One session, 5*l.* 5*s.*; perpetual, 8*l.* 8*s.*

Physiology and General and Morbid Anatomy.—Mr. Couper and Dr. Jackson. One session, 4*l.* 4*s.*; perpetual, 6*l.* 6*s.*

Practical Anatomy.—Messrs. L. S. Little and W. Rivington. Attendance

in the dissecting-room daily, from ten to three. Demonstrations and examinations. One session, 5*l.* 5*s.* ; unlimited, 8*l.* 8*s.*

Chemistry.—Dr. H. Letheby. The subjects of this course are Physics in their relation to Chemistry, and Chemistry proper. Alternately, the one or the other constitutes the chief subject of the course, so that those who are studying for the Universities may in the period of two winter sessions obtain a full course of lectures on each subject. One session, or unlimited, 7*l.* 7*s.*

Anatomy and Pathology of the Teeth, and Dental Surgery.—Mr. H. J. Barrett. Fee, 2*l.* 2*s.*

SUMMER SESSION.

Midwifery and Diseases of Women and Children.—Dr. F. H. Ramsbotham. Gentlemen when qualified have opportunities of attending an unlimited number of cases of labour in the neighbourhood of the hospital. One session, 4*l.* 4*s.* ; unlimited, 6*l.* 6*s.*

Forensic Medicine.—Dr. F. H. Ramsbotham. One course, 3*l.* 3*s.* ; two courses, or unlimited, 4*l.* 4*s.*

Materia Medica and General Therapeutics.—Dr. H. Down. One session, 3*l.* 3*s.* ; unlimited, 4*l.* 4*s.* A cabinet of *Materia Medica* is open to students.

Ophthalmic Surgery.—Mr. Hutchinson.

Practical Chemistry.—Dr. H. Letheby. Extra fee to students of the hospital, for apparatus, &c., one course, 2*l.* 2*s.* ; others, 3*l.* 3*s.*

Botany.—Dr. Chris. Dresser. It is proposed to devote occasionally a day to herborizing excursions in the neighbourhood of London, and exercises in Practical Botany. One course, 3*l.* 3*s.* ; two courses, or perpetual, 4*l.* 4*s.*

Practical Histology, and the Use of the Microscope in Diagnosis.—Dr. Jackson and Mr. Couper. A cabinet of microscopic preparations is open to the students.

Comparative Anatomy.—Mr. W. Rivington. One course, 2*l.* 2*s.* ; free to students who have paid the general fee.

Special Instruction in Operative Surgery, in accordance with the Army, Navy, and India Board Regulations, under the superintendence of Mr. C. F. Maunder.

Instruction in Medical Classics, &c., by Dr. Buchheim. Fee for the course, 2*l.* 2*s.*

Vaccination Department.—Instruction given in accordance with the recent regulations, under the general superintendence of the Obstetric Physician. The Resident Accoucheur has the immediate charge of this department.

HOSPITAL PRACTICE.

One of the physicians and one of the surgeons attend daily ; the former at eight a.m., or one p.m., the latter at one p.m. ; and one of the assistant-physicians, and one of the assistant-surgeons daily at one p.m. Casualties are admitted at all hours by the house-surgeons and dressers. Surgical operations, except in cases of emergency, are performed on Wednesdays, at half-past one p.m. Dr. Barnes attends on Tuesday at two p.m., for in-patients ; and on Wednesday and Saturday, at one p.m., for the obstetric out-patients' department.

Mr. Barrett gives practical instruction in dental operations on Tuesday, at ten a.m.

Clinical Lectures are given by the Physicians and Surgeons, and by the Obstetric Physician. Practical classes on Auscultation and Percussion.

Practical Morbid Anatomy.—The medical post-mortem examinations

take place at 2:30 p.m., and are superintended by Mr. Little. The surgical post-mortem examinations take place at half-past two p.m., and are superintended by Mr. Maunder.

Museum and Library.—The Anatomical Museum is open daily to the students, from eleven a.m. to two p.m. *Curator*, Mr. Little. The reading-room is open daily from ten a.m. to four p.m. Gentlemen who have entered to the medical and surgical practice, or to two or more courses of lectures, will be admitted without any fee to the reading-room, and to the privileges of the library on depositing 1*l.*, to be returned at the termination of the period of study at the hospital.

FEES OF ATTENDANCE ON THE HOSPITAL PRACTICE.

On the Medical Practice.—For six months, 6*l.* 6*s.* ; for period required by Apothecaries' Hall, 12*l.* 12*s.* ; unlimited, 21*l.* One medical pupil remains in the hospital as Assistant Medical Officer, day and night for a week, and is provided with commons.

On the Surgical Practice and Dressing.—For six months, including three months' dressership, 8*l.* 8*s.* ; for twelve months, including six months' dressership, 12*l.* 12*s.* ; for eighteen months, including twelve months' dressership, 18*l.* 18*s.* ; for three years, including twelve months' dressership, 26*l.* 5*s.* ; for twelve months' additional dressership, during the above three years, 5*l.* 5*s.* ; for twelve months' dressership, after the expiration of the above three years, 8*l.* 8*s.* Instruction and certificate in vaccination, 1*l.* 1*s.* The pupils enter and dress under all the surgeons.

PRIZES AND APPOINTMENTS.

The following prizes and appointments are conferred as rewards of merit on qualified pupils of the hospital and school. :—1. *Two Gold Medals* are annually awarded by the Governors to students attending the medical and surgical practice who shall have most distinguished themselves in the performance of their duties at the hospital. 2. A *Resident Medical Officer* who resides and boards in the hospital, and receives 75*l.*, is appointed for twelve months by the Committee of the hospital. He is eligible for re-election for the further period of twelve months, and then receives 100*l.* In the absence of the physicians and assistant-physicians, the resident medical officer has the general superintendence of the patients in the medical wards. 3. A *Medical and Surgical Registrar* is appointed by the Committee of the hospital, and receives 25*l.* a-year. 4. *Two House Surgeons* are elected every three months, without any additional expense ; they reside in the hospital, and are provided with commons. The house surgeons are eligible for re-election for a further period of three months. In the absence of the surgeons and assistant-surgeons, the house surgeons have the general superintendence of the surgical department of the hospital. 5. A *Resident Accoucheur* is appointed for six months, free of all expense, and is provided with residence and board. He is the Clinical Assistant to the Obstetric Physician, and under his superintendence, assists in the care of the in and out obstetric patients, and in the conduct of the Maternity Department and the Vaccination Department. 6. An *Assistant Medical Officer* is chosen from among the medical pupils. He remains in the hospital day and night for a month, and is provided with commons. 7. *Two Surgical Dressing Pupils*, in rotation, remain in the hospital day and night for a week, and are provided with commons. 8. *Four Additional Dresserships* for six months are given annually to pupils of the school, each pupil having previously the privilege of dressing the out-patients for that period. 9. An *Assistant-Dentist* is elected for three months, without any additional expense. 10. *Post-mortem Clerks* are selected from among the students, according to merit. 11. *Special Certificates* are given to those gentlemen

who have faithfully performed their various duties. 12. In the selection of candidates preference is given to those pupils who are most distinguished by general good conduct, by ability, and by industry.

ST. MARY'S HOSPITAL.

Cambridge-place, Paddington, W.

The erection of this institution was commenced in 1845, when the first stone was laid by Prince Albert, upon a site originally occupied by a reservoir of the Grand Junction Water-Works. It was opened for the reception of patients in 1850, and contains complete modern appliances for warming, ventilating, and otherwise maintaining the efficient state of a hospital. No. of beds, 150.

Phys., Drs. Alderson, Chambers, Sibson, H. Jones, Sieveking, and Markham.
—*Surgs.*, Messrs. Coulson, Lane, Ure, Spencer Smith, Haynes Walton, and Jas. Lane.—*Phys.-Acc.*, Dr. Tyler Smith.—*Oph. Surg.*, Mr. White Cooper.—*Aural. Surg.*, Mr. Toynbee.—*Dent. Surg.*, Mr. Sercombe.—*Res. Apoth.*, Mr. H. Smith.—*Med. Regist.*, Dr. Broadbent.—*Surg. Regist.*, Mr. Walter J. Coulson.

As an incentive to clinical study, the medical appointments in this hospital, including those of Resident Medical Officer, have always been open to its pupils, without additional fee or expense of any kind, thus offering advantages, both professional and pecuniary, of far more value to the student than any system of scholarship and prizes. There are four resident medical officers who board (free of all expense) in the hospital; three of them are appointed for twelve months, and one (the Obstetric Officer) for six months. There are four non-resident medical officers, each of whom is appointed for six months. These officers are awarded, after competition, preference being given to the qualified perpetual pupils of the hospital, and are held in succession, with those of Clinical Clerk and Dresser, so as to form a complete system of clinical training.

WINTER SESSION.

Physiology and General and Morbid Anatomy.—Dr. Broadbent. One session, 6*l.* 6*s.* ; unlimited, 8*l.* 8*s.*

Descriptive and Surgical Anatomy.—Mr. Gascoyen. One session, 6*l.* 6*s.* ; unlimited, 8*l.* 8*s.* Mr. James Lane will give the demonstrations of the surgical operations on the dead body.

Practical Anatomy and Superintendence of Dissections.—Messrs. Norton and Coombs.

Chemistry.—Mr. Fred. Field. One session, 5*l.* 5*s.* ; unlimited, 7*l.* 7*s.*

Principles and Practice of Medicine.—Drs. Chambers and Sibson. One session, 4*l.* 4*s.* ; unlimited, 6*l.* 6*s.*

Principles and Practice of Surgery.—Messrs. Lane and Spencer Smith. One session, 4*l.* 4*s.* ; unlimited, 6*l.* 6*s.*

Clinical Medicine.—Drs. Alderson, Chambers, and Sibson. One session, 3*l.* 3*s.* ; unlimited, 4*l.* 4*s.*

Clinical Surgery.—Messrs. Coulson, Lane, and Ure. One session, 3*l.* 3*s.* ; unlimited, 4*l.* 4*s.*

SUMMER SESSION.

Botany.—Dr. Chris. Dresser. One session, 3*l.* 3*s.* ; unlimited, 4*l.* 4*s.*

Materia Medica and Therapeutics.—Dr. Sieveking. One session, 4*l.* 4*s.* ; unlimited, 6*l.* 6*s.*

Practical Chemistry.—Dr. Matthiessen, F.R.S. One session, 3*l.* 3*s.*

Midwifery and the Diseases of Women and Children.—Drs. T. Smith and G. Hewett. One session, 4*l.* 4*s.* ; unlimited, 6*l.* 6*s.*

Medical Jurisprudence.—Dr. Randall. One session, 3*l.* 3*s.* ; unlimited, 4*l.* 6*s.*

Ophthalmic Surgery.—Mr. E. Hart. Fee, 2*l.* 2*s.*

Aural Surgery.—Mr. J. Toynbee. Fee, 2*l.* 2*s.*

Dental Surgery.—Mr. Sercombe.

Comparative Anatomy and Zoology.—Mr. St. George Mivart, F.L.S., F.Z.S. One session 2*l.* 2*s.* ; unlimited, 3*l.* 3*s.*

Natural Philosophy.—Mr. G. R. Smalley, B.A. One session, 2*l.* 2*s.* ; unlimited, 3*l.* 3*s.*

Vaccination.—In order to meet the requirements of the Royal College of Surgeons, arrangements have been made by which students may receive instruction in this subject at an Educational Vaccine Station in the vicinity of the hospital. Fee 1*l.* 1*s.*

Entrance-fees to the hospital practice and lectures required for the examination at the Royal Colleges of Physicians and Surgeons and the Society of Apothecaries, 8*9l.* 5*s.*

Entrance-fee as a perpetual pupil, entitling the student to unlimited attendance on the hospital practice, and on every course of lectures delivered in the school, with instruction in Practical Chemistry, during one session, and the right to compete for all the offices mentioned above, 105*l.*

PRIZES AND CERTIFICATES OF HONOUR.

A Scholarship in Anatomy.—Of the annual value of 25*l.* (the holder of which will be styled Assistant-Demonstrator, and assist in the teaching of Practical Anatomy) will be awarded, after examination, to the best qualified student.

A Prize of Twenty Pounds for students of the first year, is given after competition, at the end of the winter session.

Examinations for prizes will take place at the termination of each session : the classes being grouped in accordance with the curriculum laid down for students of the first, second, and third years ; the average value of each of these prizes is 5*l.* 5*s.* Prizes in the classes of Comparative Anatomy and Natural Philosophy are also given.

Practical Anatomy.—A prize of the value of 4*l.* 4*s.* will be awarded to the student who shall make the best anatomical preparation ; such preparation to become the property of the school.

Two Prosectors are appointed annually, who each receive a certificate and 5*l.* for their services in the Dissecting-Room.

Honorary Certificates are also given for proficiency in the several classes.

HOSPITAL PRACTICE.

The hospital contains 150 beds, 65 of which are devoted to medical, and the rest to surgical cases. This division includes a ward appropriated to the diseases of women, and also beds for ophthalmic and aural cases. During the past year 1,715 in-patients and 14,350 out-patients and casualties received relief.

The In-patients are visited daily by the physicians and surgeons at a quarter-past one.

Clinical Lectures are regularly delivered twice a-week by the physicians and surgeons in charge of the in-patients, and occasionally by the other medical officers in their respective departments.

The Out-patients are seen daily at half-past twelve by the physicians and surgeons in charge of them.

The Physician-Accoucheur attends on Tuesdays and Saturdays at half-past one o'clock. The Ophthalmic Surgeon attends on Tuesdays and Saturdays at half-past one o'clock. The Aural Surgeon attends on Mondays and Thursdays at half-past one o'clock. The Surgeon-Dentist attends on Mondays and Thursdays at half-past nine o'clock. Students can attend these several branches of practice.

Surgical Operations are performed on Wednesdays at half-past one o'clock.

Post-mortem Examinations are made by Mr. Chisholm, the Curator of the Museum, at two o'clock, as opportunities occur.

A *Maternity Department* is attached to the hospital for the delivery of poor married women at their own homes (301 were attended during the past year). Pupils are allowed to attend cases, under the direction of the Resident Obstetric Officer.

All general students are required to perform the duties of Clinical Clerk and Dresser during the last two years of their curriculum, and certificates are granted to those who have satisfactorily performed the duties of these appointments.

FEES.

For Medical Practice.—Three months, 5*l.* 5*s.*; six months, 7*l.* 7*s.* twelve months, 12*l.* 12*s.*; eighteen months, 15*l.* 15*s.*; perpetual, 21*l.*

For Surgical Practice.—Three months, 6*l.* 6*s.*; six months, 9*l.* 9*s.* twelve months, or such time as is required by the College of Surgeons, 21*l.* perpetual, 31*l.* 10*s.*

Practical Pharmacy.—Students may receive private instruction in Practical Pharmacy in the laboratory and dispensary of the hospital on the following terms:—Three months, 3*l.* 3*s.*; six months, 6*l.* 6*s.*; twelve months, 10*l.* 10*s.*

THE MIDDLESEX HOSPITAL.

Berners Street, W.

This hospital was established in 1745. The present building was commenced in 1755. In 1836, a charter of incorporation was obtained, and in 1848, the building was considerably enlarged and improved. It is capable of accommodating about 300 patients. The Cancer Ward, a special feature of the hospital, was formed in 1792, upon a plan made by the philanthropist, John Howard, at the sole expense of Mr. Whitbread, M.P., who endowed the ward with 4,000*l.*, so that the patients suffering from cancer might remain in the hospital for life.

Phys., Drs. Stewart, Goodfellow, and Thompson.—*Phys.-Acc.*, Dr. J. H. Davis. *Asst.-Phys.*, Drs. Murchison, Greenhow, and Sanderson.—*Surgs.*, Messrs. Shaw, De Morgan, Moore, and Nunn.—*Asst.-Surgs.*, Messrs. Hulke and Lawson.—*Ophthal. Surg.*, Mr. Soelberg Wells.—*Surg. Dentist.*, Mr. Tomes. *Apoth.*, Mr. Devereux.—*Superint.-Regist.*, Dr. Cayley.

WINTER SESSION.

Principles and Practice of Medicine.—Drs. Stewart and Goodfellow.
Principles and Practice of Surgery.—Mr. Shaw.
Physiology and General Anatomy.—Mr. C. De Morgan.

Descriptive and Surgical Anatomy.—Mr. Moore.

Operative Surgery.—Mr. Nunn.

Practical Anatomy and Demonstrations.—Dr. Robert Liveing.

The dissecting-room is open daily. Admission to the dissections for those who are not pupils of the anatomical class, one session, 4*l.* 4*s.* ; perpetual, 6*l.* 6*s.*

Morbid Anatomy.—Mr. Sibley and Dr. Murchison.

Chemistry.—Messrs. T. Taylor and Heisch.

SUMMER SESSION.

Midwifery and Diseases of Women and Children.—Dr. J. H. Davis.

Materia Medica and Therapeutics.—Dr. H. Thompson.

Medical Jurisprudence.—Dr. Greenhow.

Botany.—Dr. T. Spencer Cobbold.

Comparative Anatomy.—Dr. T. Spencer Cobbold.

Practical Chemistry.—Messrs. Taylor and Heisch.

Histology and Minute Anatomy.—Dr. W. Webb.

Public Health.—Dr. Greenhow.

HOSPITAL PRACTICE.

Medical Practice.—For three months, 6*l.* 6*s.* ; six months, 10*l.* 10*s.* ; eighteen months, 15*l.* 15*s.* ; an unlimited time, 21*l.*

Surgical Practice.—For six months, 10*l.* 10*s.* ; twelve months, 12*l.* 12*s.* ; three years, 18*l.* 18*s.* ; an unlimited time, 21*l.*

Fee to the Apothecary, Secretary, &c., 1*l.* 6*s.* Fee for the entire period of attendance required by the Colleges of Physicians and Surgeons and Apothecaries' Company (viz., eighteen months of medical, and three years of surgical practice), 35*l.* This payment includes the fees of the apothecary and secretary.

General fee for attendance on the hospital practice and lectures required by the Colleges of Physicians and Surgeons and by the Apothecaries' Company, 88*l.* 4*s.* This sum may be paid by instalments of 35*l.* at the beginning of the first session, 35*l.* at the beginning of the second session, and 18*l.* 4*s.* at the beginning of the third session ; for every additional session, 10*l.* This fee admits the students to the Practical Chemistry course, and to all other lectures delivered in the College, except Comparative Anatomy. *Unlimited attendance* on payment of the general fee in one sum at the beginning of the first winter session.

Instruction in Practical Pharmacy, with opportunities of dispensing, is given by the apothecary ; fee for six months, 4*l.* 4*s.* ; for twelve months, 6*l.* 6*s.*

Instruction in Pharmacy, in the drug-room, without dispensing ; for three months, 4*l.* 4*s.*

Museum.—Curator, Dr. T. Spencer Cobbold. The museum is open to students daily.

Library.—Admission to the library and reading-room is included in the fees paid by general students. Occasional students, who desire to make use of the library, may do so on payment of 1*l.* 1*s.* The library contains an extensive collection of medical works, with the various medical periodicals. The books are allowed to be taken out from the library under proper regulations.

A *Medical Society* is established, under regulations sanctioned by the governing body of the hospital. A prize is given by the Society for the best paper of the session.

Written Periodical Class Examinations will be held in the course of each session, and must be attended by all general students.

To those students who have most distinguished themselves at the above, in all the subjects of study embraced in the session, prizes of various value will be awarded. Certificates of Honour will also be given for proficiency in each of the classes.

Clayton Prize.—An annual prize of the value of three guineas, given by Oscar Clayton, Esq., will be awarded for proficiency in Comparative Anatomy.

Clinical Prizes in medicine and surgery are awarded for reports of cases.

The Governors' Prize of twenty guineas will be awarded to the student who, having distinguished himself generally by conduct and acquirements in the school, shall present the best joint clinical reports in Medicine and Surgery.

The authorities of the hospital have made arrangements by which the in-patient clinical clerk and dresser of the day, and also a limited number of general students, under certain regulations, have liberty to dine with the resident officers at the board-room table.

From recent enlargements the hospital now contains upwards of 300 beds, of which 185 are for surgical, and 120 for medical cases. The cancer establishment receives thirty-three patients. Wards are also specially appropriated to cases of uterine disease and of syphilis. Beds are set apart for cases of diseases of the eye.

Clinical Clerks and Dressers.—General students have the privilege of performing the duties of clinical clerks and dressers, according to arrangements which the Clinical Directors may from time to time consider expedient. First-year students will not enter on the clinical duties until the first summer session, when they will act as clinical clerks and dressers in the out-patient department, under the superintendence of the assistant-physicians and the assistant-surgeons. The out-patients' dressers will thus have the opportunity of practising bandaging and other minor surgical operations, and the clinical clerks will be prepared to undertake the duties of clerks to the physicians. Special certificates will be granted to those general students who have complied with the regulations.

Resident Medical Appointments.—Six resident appointments, viz., three resident medical assistantships, one obstetric assistantship, and two house surgeoncies, are annually given to students who have completed their education at the College according to the established regulations. The selection is made after competitive examination of the candidates. The officers thus appointed reside and board in the hospital free of expense. The house-surgeons pay a fee of twenty-guineas.

Clinical lectures are delivered twice a-week by the physicians and surgeons respectively, and once a week by the physician-accoucheur and ophthalmic surgeon respectively.

The medical and surgical out-patients are attended on four mornings in the week by the assistant-physicians and assistant-surgeons, and every opportunity is taken to render this department available to the pupils for the ready investigation of disease.

Midwifery and the Diseases of Women and Children.—Upwards of 850 cases of labour were attended under the direction of the physician-accoucheur during the last year, and the students are at all times furnished with an ample supply of cases under his superintendence. Students are aided in their first cases of labour by the resident obstetric assistant. A ward is appropriated to the treatment of diseases peculiar to women. Out-patients with uterine and infantile diseases are seen by the physician-accoucheur on Wednesdays and Saturdays at one o'clock.

Ophthalmic Department.—Patients with diseases of the eye are attended by Mr. Soelberg Wells on Mondays, Wednesdays, and Fridays, at half-past twelve o'clock. In-patients at half-past one.

Dental Surgery.—Pupils receive instruction on diseases of the teeth, and the operations connected with them, on Tuesdays, Thursdays, and Saturdays, at nine o'clock. Fee for occasional pupils, five guineas. For those who desire to comply with the regulations of the Royal College of Surgeons in respect to the examination for certificates in dental surgery, the general fee will be forty guineas. This sum may be paid by instalments of twenty-five guineas at the beginning of the first session, and fifteen guineas at the beginning of the second session. A special course of lectures on the Anatomy of the Head and Neck will be instituted in connection with these regulations.

Post-mortem Examinations are performed under the superintendence of Dr. Cayley, at two o'clock.

ST. THOMAS'S HOSPITAL.

Newington, Surrey, S.

The ancient hospital of St. Thomas, situated in Wellington-street, Southwark, was originally an almshouse, founded by the Prior of Bermondsey in 1213, adjacent to the walls of the monastery. After the suppression of the religious houses in England, it was purchased by the city of London, in 1539, received a charter as one of the Royal Hospitals,* in 1551, and was opened for the relief of the destitute sick in 1552. The hospital was rebuilt between 1701 and 1706, principally by means of subscriptions. In 1732, the hospital was enlarged. Guy, the founder of Guy's Hospital, was also a great benefactor to St. Thomas's. The recent railway extension from the London Bridge Station to Charing Cross, rendered it necessary to pull down the old hospital, and the institution has been temporarily removed to the site formerly occupied by the Zoological Gardens at Walworth. Much discussion has arisen concerning the most suitable permanent position of St. Thomas's; but it is almost a matter of certainty, that a suitable building will be, at some future time, erected on the southern bank of the Thames, opposite to the Houses of Parliament.

Phys., Drs. Barker, J. R. Bennett, Goolden, Peacock, Bristowe, and Brinton.—*Surgs.*, Messrs. South, Solly, Le Gros Clark, Simon, and Sydney Jones.—*Asst.-Phys.*, Dr. Clapton.—*Asst.-Surg.*, Mr. John Croft.—*Obst. Asst.-Phys.*, Dr. Gervis.—*Res. Med. Officer*, Mr. Whitfield.

The Physicians and Surgeons commence their visits daily at half-past eight or nine. The out-patients are prescribed for daily at twelve o'clock, by the assistant-physician, surgeon, and assistant obstetric physician. The patients are admitted daily at eleven.

The admission fee to hospital practice and all the lectures is 40*l.* for the first year, a similar one for the second, and 10*l.* for each succeeding year; or 90*l.* at one payment for unlimited attendance. *Special entries* may be made to any course of lectures, or to the hospital practice.

* The five Royal Hospitals of the city of London, under the immediate care of the Corporation, are St. Bartholomew's, St. Thomas's, Bethlehem, Bridewell, and Christ's Hospital. Only two of these, the two first-named, are general hospitals.

A *Chemical Laboratory*, under the direction of the chemical lecturer, is provided for students.

Subject to certain regulations, the students have access to the library and to the use of a microscope; as also to the museums of anatomy and pathology, of materia medica, and of chemistry and mineralogy.

Examinations are held at the end of the winter and summer sessions.

Operations on Saturdays at one o'clock.

Post-mortem Examinations by Mr. J. Wale Hicks.

WINTER SESSION.

Demonstrations.—Messrs. Rainey and Croft.

Descriptive and Surgical Anatomy.—Mr. Sydney Jones.

Chemistry and Natural Philosophy.—Dr. A. J. Bernays.

Physiology and General Anatomy.—Dr. Brinton.

General Pathology.—Mr. Simon.

Surgery.—Mr. F. Le Gros Clark.

Microscopical Anatomy.—Mr. Rainey.

Clinical Medicine.—The Physicians.

Theory and Practice of Medicine.—Dr. T. B. Peacock.

SUMMER SESSION.

Materia Medica.—Dr. Bristowe.

Forensic Medicine.—Dr. Stone.

Midwifery and the Diseases of Women and Children.—Dr. Barnes.

Botany.—Dr. Clapton.

Practical Chemistry.—Dr. A. J. Bernays.

Comparative Anatomy and Natural History.—Mr. W. M. Ord.

Clinical Medicine.—Drs. Peacock and Brinton.

Two *Medical Clinical Lectures* will be delivered by the Physicians, and one *Surgical Lecture* by the Surgeons in each week.

There is a special *Ophthalmic Ward*, under Messrs. S. Jones and Croft, and a special department for the *Diseases of Women and Children*, under Dr. Gervis.

Instruction in Dental Surgery by Mr. Elliott.

Medical Tutors.—Mr. Allingham and Dr. Gervis.

PRIZES.

Matriculations.—To encourage and reward a good general education in pupils entering the medical and surgical school, there is held early in October a Matriculation Examination, in three divisions, viz.:—1. In Mathematics, Classics and Ancient History, *the President's Prize of twenty guineas*; 2. In Physics and Natural History, *a College Prize of 20l.*; 3. In Modern Languages and Modern History, *a College Prize of 20l.* Attendance at these examinations is optional, but all matriculating students are at liberty to compete in any one or more of them. *The Tite Scholarship*, founded by W. Tite, Esq., M.P., F.R.S., the proceeds of 1,000l. Consols, tenable for three years, is awarded every third year. To the three most distinguished pupils for general proficiency in early years, the following prizes are awarded:—

First Year's Students.—1. The Treasurer's Prize of thirty guineas; 2. A College Prize of 20l.; 3. A College Prize of 10l.

Second Year's Students.—1. A College Prize of 30l.; 2. A College Prize of 20l.; 3. A College Prize of 10l. Clinical clerks and dressers are selected according to merit from among the students of this period. Dressers are

provided with rooms and commons during their period of attendance in the hospital, free of expense.

Third Year's Students.—1. A College Prize of 30*l.*; 2. A College Prize of 20*l.*; 3. A College Prize of 10*l.*

Fourth Year's Students.—1. For Practical Medicine and Pathology, a College Prize of 20*l.*; 2. For Practical Surgery and Pathology, a College Prize of 20*l.*

The Grainger Testimonial Prize of the value of 20*l.*, will be awarded biennially to third or fourth year's students for the best Physiological Essay, to be illustrated by preparations and dissections.

The Cheselden Medal, founded by George Vaughan, Esq., is awarded in respect of a special examination in surgery and surgical anatomy.

The Smith Prize of 5*l.*, founded by Newman Smith, Esq., for the best essay on "Neuralgia."

The Treasurer's Gold Medal is given annually for general proficiency and good conduct to whichever student has passed through his pupilage in the most meritorious manner.

The House-Surgeons and Resident Accoucheur are chosen, according to merit, from gentlemen who have obtained their professional diplomas; the former to hold office for six or twelve months, the latter for three or six; all are provided with rooms and commons.

A Hospital Registrar, at an annual salary of 80*l.*, or two at 40*l.*, will be selected from gentlemen who have been distinguished for merit, and who have completed their studies in the school.

Students of each year are classed according to their respective total merits in the examinations; and all of the first class, in each year receive certificates of honour.

Mr. Whitfield, the Medical Secretary, will furnish any additional particulars which may be required respecting the course of study, the Tite prizes, &c.

UNIVERSITY COLLEGE HOSPITAL.

Gower-street, W.C.

This hospital was established in 1833, under the Presidency of Lord Brougham, in connection with University College. It accommodates about 140 in-patients, and has special departments for ophthalmic and cutaneous affections.

Phys., Drs. Jenner, Hare, and Reynolds.—*Obst. Phys.*, Dr. Murphy.—*Asst.-Phys.*, Drs. Harley, W. Fox, and S. Ringer.—*Surgs.*, Messrs. Quain, Erichsen, Marshall, and Thompson.—*Cons. Surg.*, *Eye Infirm.*, Mr. Quain.—*Ophth. Surg.*, Mr. W. Jones.—*Asst.-Surg.*, Mr. B. Hill.—*Asst. Ophth. Surg.*, Mr. J. N. Streatfeild.—*Med. Off. to Skin Infirm.*, Dr. Hillier.—*Dent. Surg.*, Mr. G. A. Ibbetson

WINTER TERM.

Anatomy.—Mr. Ellis. The entire term, 7*l.* 7*s.*; first half term, 4*l.* 4*s.*; second half term, 4*l.* 4*s.*; perpetual, 10*l.* 10*s.* In the dissecting-room the pupils will be directed in their studies during several hours daily by Mr. Ellis, and by Dr. B. Hill, Demonstrator.

Anatomy and Physiology.—Dr. Sharpey. Entire term, 6*l.*; first half term, 3*l.*; second half term, 3*l.*; perpetual, 9*l.*

Chemistry.—Dr. Williamson. Half term, 3*l.*; entire term, 6*l.*; perpetual, 9*l.*

Comparative Anatomy and Zoology.—Dr. Grant. *Comparative Anatomy*: From the beginning of October to the end of January. *Zoology*: From the 1st of February to the 1st of May. For *Comparative Anatomy*, 4*l.*; for *Zoology*, 3*l.*; perpetual, 9*l.* Attendance on Dr. Grant's courses of *Comparative Anatomy and Zoology* at this College is recognised by the Army Medical Board as equivalent to the course of Natural History required as a qualification for army surgeons.

Principles and Practice of Medicine.—Dr. Jenner. For the entire term, 6*l.* 10*s.*; first half term, 3*l.* 5*s.*; second half term, 3*l.* 5*s.*; perpetual, 8*l.*

Principles and Practice of Surgery.—Mr. Erichsen. For the term, 4*l.* 10*s.*; perpetual, 6*l.*

Practical Physiology and Histology.—Dr. G. Harley. Fee, 3*l.*

Dental Surgery.—Mr. G. A. Ibbetson. Fee, 1*l.* 1*s.*

SUMMER TERM.

Materia Medica and Therapeutics.—Dr. Ringer. Fee, 4*l.*; perpetual, 6*l.*

Pathological Anatomy.—Dr. Wilson Fox. Fee, 3*l.*; perpetual, 4*l.*

Medical Jurisprudence.—Dr. Harley. Fee, 3*l.*; perpetual, 4*l.* 4*s.*

Practical Chemistry.—Dr. Williamson. Fee, 4*l.* This payment includes all costs of materials, apparatus, &c.

Midwifery and Diseases of Women and Children.—Dr. Murphy. Fee, perpetual, 6*l.*

Palæo-Zoology.—Dr. Grant. Fee, 1*l.*

Ophthalmic Medicine and Surgery.—Mr. Wharton Jones. Fee, 2*l.*

N.B.—Gentlemen who propose to attend this course are requested to enter their names before the 1st of May, in order that the most convenient hour of lecture may be determined on.

Botany.—Mr. D. Oliver, F.R.S., F.L.S. Fee, 3*l.*; perpetual, 4*l.*

Practical Instruction in Operative Surgery.—Mr. John Marshall. Fee, including expenses for matriculated students of class of anatomy, 5*l.* 5*s.*; for others, 7*l.* 7*s.*

Analatical Chemistry.—Dr. Williamson. The instruction in this department is conducted in a spacious laboratory, with complete arrangements for the pursuit of all branches of chemical investigation by the senior pupils, and for the practical study of elementary analysis by those less advanced. The laboratory is open daily from nine a.m. to four p.m., from the 1st of October until the end of July, with a short recess at Christmas and Easter. The Professor is aided in the direction of the students by assistants. Fee, exclusive of the expense of materials, twenty-five guineas; for three months, four guineas; for a single month, four guineas.

Logic, French and German languages, Natural Philosophy, Geology and Mineralogy, according to announcement, for the Faculty of Arts.

WINTER AND SUMMER TERM.

Clinical Instruction.—Clinical instruction is given by the physicians and surgeons of the hospital in their daily visits, and also by means of lectures and examinations upon the cases. Payment included in the hospital fee.

Clinical Medicine.—Lectures by Drs. Jenner, Hare, and Murphy; also by Dr. Reynolds, Professor of Clinical Medicine, whose special duty it is to train the pupils in the practical study of disease, and who gives a series of lessons and examinations on the physical phenomena and diagnosis of disease, to classes consisting of a limited number, and meeting at separate hours.

Clinical Surgery.—Lectures twice a week by Mr. Quain, and once a fortnight by Mr. Erichsen.

The Physicians' and Surgeons' visits are made daily at one and two o'clock.

Obstetric Department.—Dr. Murphy attends three times a week to see patients affected with uterine disease, and children; and on Monday, at twelve o'clock, to receive applications from women who wish to be attended in their confinement.

Ophthalmic Department.—Mr. W. Jones makes his visit three times a week, and occasionally delivers Clinical Lectures on the cases under his charge.

An Assistant-Physician and an Assistant-Surgeon attend four days in the week for the care of out-patients.

The Dental Surgeon attends on Wednesday mornings at ten o'clock.

Bandaging.—A course of practical instruction in the application of bandages and other surgical apparatus is given by Mr. Marshall.

Practical Pharmacy.—Instruction in the hospital dispensary for three or six months as required.

SCHOLARSHIPS, ETC.

At the end of every session there will be awarded a "Filliter" Exhibition of 30*l.*, as a prize for proficiency in pathological anatomy, and a "Longridge" Exhibition of 40*l.*, as a prize for general proficiency in medicine and surgery.

Atkinson Morley Surgical Scholarships—"For the promotion of the study of surgery amongst the students of University College, London." A scholarship will be awarded every year. Each scholarship will be of the annual amount of 45*l.*; it will be tenable for three years, and will be payable on the day of election, and on the 16th of June in each of the two following years. The election will take place on the 16th day of June in every year, or the day preceding when the 16th falls on a Sunday; and will be made by the Council after receiving the report of Examiners.

According to the directions of the will of Mr. Morley, the founder of these scholarships, elections for these scholarships will take place on the 16th day of June in each year; and persons to be eligible as candidates must have been of approved good conduct in the College, and students in the classes of the Faculty of Medicine of the College, for not less than three nor more than five years, such years of studentship to be immediately preceding each such election or appointment, and they may be deemed by the Faculty of Medicine in the College to possess a competent knowledge of anatomy, chemistry, physiology, and medicine. Among such eligible candidates such one student will be elected in each year, who, upon examination, to be conducted in such manner as the Council of the College shall from time to time direct, shall be found to possess the greatest proficiency in the theory and practice of surgery.

TERMS OF ADMISSION TO THE PRACTICE AND CLINICAL LECTURES.

To students who have already entered, in the Medical Faculty of the College, to three classes, of which the courses are of six months' duration (two classes, in which the courses are of three months' duration, being considered equivalent to one of six months):—

Also to pupils who produce certificates of having attended a course of lectures of a recognised school of medicine, and during one year the practice of a recognised hospital:—For perpetual admission to the medical and surgical practice, 2*5*l.** 5*s.* For one year to the physicians' and surgeons',

practice, 21*l.* ; physicians' or surgeons' practice separately, 15*l.* 15*s.* For six months to the physicians' and surgeons' practice, 15*l.* 15*s.* ; physicians' or surgeons' practice separately, 10*l.* 10*s.* For instructions in bandaging, 1*l.* 1*s.* For six months' practical pharmacy, 5*l.* 5*s.* ; three months, 3*l.* 3*s.* To pupils other than as above specified:—For perpetual admission to the medical and surgical practice, 36*l.* 15*s.* For one year to the physicians' and surgeons' practice, 30*l.* ; physicians' or surgeons' practice separately, 22*l.* For six months to the physicians' and surgeons' practice, 22*l.* ; physicians' or surgeons' practice separately, 15*l.* For six months' ophthalmic practice, 5*l.* 5*s.* For twelve months' dental surgery practice, 5*l.* 5*s.* For instruction in bandaging, 1*l.* 1*s.* For six months' practical pharmacy, 5*l.* 5*s.* ; three months, 3*l.* 3*s.*

The above fees are to be paid at the Office of the College.

Every pupil pays in addition to the fees, 10*s.* apothecary's, and 5*s.* office fees.

Physicians' assistants, house-surgeons, midwifery assistants, physicians' clerks, surgeons' dressers, and ophthalmic surgeons' assistants, are selected from pupils being students of the College and of unexceptionable moral character, without additional payments. In case of the qualifications of the candidates for the respective offices being equal, preference will be given to those who have obtained the highest honours in the medical classes of the College. The physicians' assistant, obstetric assistant, and house-surgeons reside in the hospital, paying for their board.

WESTMINSTER HOSPITAL.

Broad Sanctuary, S.W.

This is the oldest subscription-hospital in the metropolis, having been instituted in 1719. The charity was located in various situations before it was removed to the Broad Sanctuary, where the present hospital was built upon a piece of ground purchased of the government for 6,000*l.*, originally part of the site of the ancient Sanctuary Church. The roof, nearly half an acre in extent, is an airing-walk for the patients. The hospital contains 200 beds, and affords relief to about 2,000 in-patients, and 20,000 out-patients annually.

Phys., Drs. Basham, Fincham, and Radcliffe.—*Obst. Phys.*, Dr. F. Bird.—*Asst.-Phys.*, Drs. Anstie, Gibb, and Willis.—*Surgs.*, Messrs. Holt, Brooke, and Holthouse.—*Asst. Surgs.*, Messrs. Hillman, Power, and Heath.—*Surg. Dent.*, Mr. Walker.—*Sec.*, Mr. F. J. Wilson.

The in-patients are visited daily, at half-past one p.m., by the physicians and surgeons ; and the out-patients at one by the assistant-physicians and assistant-surgeons. Surgical operations are performed on Tuesdays at two o'clock. Post-mortem examinations and demonstrations of Pathological Anatomy are conducted by Dr. Willis and Mr. Power, under the superintendence of the physicians and surgeons, at two o'clock.

Ophthalmic Surgery.—In addition to the Ophthalmic practice of the hospital, the students are permitted to attend the practice of the Royal Westminster Ophthalmic Hospital, without additional fee.

Practical Midwifery.—When properly qualified to attend lying-in patients, pupils will be amply supplied with cases from the Westminster Maternity Charity.

Dental Surgery.—In addition to a special course of lectures on dental surgery, practical instruction in dental operations will be given three times a week.

Practical Pharmacy.—Instruction in this subject, with opportunities for dispensing, may be obtained in the dispensary of the hospital.

Museum, Reading-Rooms, and Library.—The museum of physiological and pathological anatomy, the museum of materia medica, a reading room, supplied with medical periodicals, and a library, are open for the use of students. Students are entitled to take the library books to their own homes for a limited period upon payment of an annual subscription of 5s.

WINTER SESSION.

Descriptive and Surgical Anatomy.—Mr. Christopher Heath.

Dissections.—Demonstrator, Mr. W. F. Teevan, daily.

Physiology and General Anatomy.—Mr. Power.

Chemistry.—Dr. F. Duprè.

Principles and Practice of Surgery.—Mr. Holthouse.

Principles and Practice of Medicine.—Dr. Basham.

Dental Surgery.—Mr. Walker.

SUMMER SESSION.

Botany.—Mr. Syme.

Comparative Anatomy and Zoology.—Mr. Power.

Forensic Medicine.—Drs. Fincham and Gibb.

Materia Medica and Therapeutics.—Dr. Anstie.

Natural Philosophy.—Mr. Brooke.

Midwifery and Diseases of Women and Children.—Dr. F. Bird.

Practical Chemistry.—Dr. F. Duprè.

EXAMINATIONS.

Special Examinations.—On the subjects required by the Examining Boards will be held during the latter half of the winter session by the following lecturers and medical officers:—Dr. Anstie and Dr. Gibb on Medicine, Materia Medica, and Chemistry; and Mr. Power, Mr. Heath, and Mr. Teevan, on Anatomy, Physiology, and Surgery.

These examinations will be open to all students of the medical school without extra fee.

PRIZE-APPOINTMENTS AND PRIZES.

House-Physician and House-Surgeon.—The offices of House-Physician and House-Surgeon, who, in the absence of the physicians and surgeons, have the sole charge of the medical and surgical patients respectively, are open to competition amongst gentlemen who have been educated at the hospital, and who are qualified to practise under the Medical Registration Act, the successful competitors being appointed by the House Committee upon the recommendation of the physicians and surgeons. Candidates are required to produce testimonials as to moral character, and certificates of having acted for six months as clinical clerk or dresser—as clinical clerk for the office of House-Physician, as dresser for that of House-Surgeon. The House-Physician and House-Surgeon are not only appointed without the payment of any fee, but they are provided with board and lodging in the hospital, free of expense.

Assistant House-Surgeon.—Is appointed without fee from among the senior students by examination, and is required to attend at the hospital from ten a.m. to seven p.m. daily. He is provided with commons at the hospital table.

Clinical Clerks and Dressers.—These appointments are conferred without

fee, in rotation, upon the most diligent students. The clinical clerk and dresser of the week are entitled to have luncheon in the hospital, free of expense.

PRIZES.

The following prizes will be offered for competition to the students of the hospital and medical school.

I. Books to the value of three guineas for each of the winter courses ; and books to the value of two guineas for each of the summer courses, to be competed for by students attending those classes.

II. Certificates of Honour to the second-best candidate in each class.

III. A prize of the value of five guineas, to be competed for by all students who have not presented themselves for their final examinations before any of the Examining Boards, the subject being Clinical Medicine.

IV. A prize of similar value, and under similar conditions, for Clinical Surgery.

V. A special prize will be given for Clinical Midwifery by the Westminster Maternity Charity.

VI. A special prize will be given by Mr. Clendon for Dental Surgery.

The examinations for the Clinical Prizes will take place at the end of each winter session.

SCALE OF FEES.

The Entire Course of Study (including hospital practice and lectures) required by the College of Physicians and the Society of Apothecaries for their Licences, and by the College of Surgeons for the Diploma of Membership, may be attended on payment of seventy-five guineas, in instalments of thirty-five guineas at the commencement of the first year, thirty guineas at the commencement of the second year, and ten guineas at the commencement of the third year.

Perpetual Entry to all such lectures and hospital practice may be obtained by payment of eighty guineas on entry, or in two equal instalments at the commencement of the first and second year. Any entry may be made *perpetual* within the first year, but not subsequently.

The whole of the lectures and practice for *any single year* may be attended on payment of thirty-five guineas.

Dental Diploma.—The whole of the lectures and surgical practice required for the Dental Diploma of the College of Surgeons may be attended on payment of thirty-five guineas, in instalments of twenty guineas at the commencement of the first, and fifteen guineas at the commencement of the second year.

HOSPITAL PRACTICE.—The entire period of hospital practice required for the Licences of the College of Physicians and of the Society of Apothecaries, and for the Diploma of Membership of the College of Surgeons, may be attended for twenty-eight guineas.

Perpetual entry to entire Hospital Practice, thirty-three guineas.

Shorter periods of Hospital Practice may be attended as follows :

Medical Practice.—Six months, eight guineas ; twelve months, twelve guineas ; eighteen months, fifteen guineas ; perpetual, twenty-one pounds. *Surgical Practice*, six months, eight guineas ; twelve months, twelve guineas ; eighteen months, fifteen guineas ; perpetual, 21*l*. *Dental Practice*, for gentlemen who are not regular pupils of the School ; three months, five guineas ; eight months, eight guineas.

Lectures.—The whole of the lectures required for the licences of the College of Physicians and the Society of Apothecaries, and for the Diploma of Membership of the College of Surgeons, may be attended on payment of forty-seven guineas, in two equal instalments at the commencement of the

first and second year ; or, each Course may be attended separately, as follows :

Anatomy, Physiology, Chemistry, Medicine, Surgery. One course, five guineas ; perpetual, seven guineas. *Midwifery*—one course, four guineas ; perpetual, five guineas. *Materia Medica, Forensic Medicine, Botany*—one course, three guineas ; perpetual, four guineas. *Practical Chemistry*—each course, two guineas. *Comparative Anatomy*—two guineas. *Practical Anatomy*—one session, two guineas ; perpetual, three guineas.

For gentlemen who are not regular pupils of the School, the admission to the Dissections and Demonstrations is, for three months, two guineas ; six months, three guineas ; perpetual, five guineas.

PROVINCIAL SCHOOLS OF MEDICINE.

BIRMINGHAM. QUEEN'S COLLEGE.

Anatomy, Professor B. W. Foster ; *Botany*, Professor Hinds ; *Chemistry*, Professor Alfred Anderson ; *Forensic Medicine*, Professor John Postgate ; *Materia Medica*, Professor Divers ; *Medicine*, Professor Wade ; *Midwifery*, Professors John Clay and Dr. Suckling ; *Physiology*, Professor Lawson ; *Surgery*, Professor Sands Cox ; *Medical Tutor and Demonstrator*, Dr. Foster ; *Clinical Medicine*, Drs. Wade, Fleming, and Sutton ; *Clinical Surgery*, Professors Sands Cox, West, and Gamgee ; *Clinical Midwifery*, Professor Berry ; *Practical Midwifery*, Dr. Sucklin, and Mr. John Clay ; *Ophthalmic Surgery*, Mr. Benjamin Hunt ; *Dental Surgery*, Mr. Samuel A. Parker.

Students of the College may be either resident or non-resident, at the option of their friends. The Professor of Classics, a graduate of Oxford—the Professor of Mathematics, a graduate of Cambridge, both married clergymen—and the Medical Tutor, a graduate of the King and Queen's College, Ireland, reside in College, and to them is committed by the Council the care of the resident students. It is also the duty of the Medical Tutor to prepare the junior medical students for the Matriculation Examination of the University of London, to devote daily a certain number of hours to practical instruction in the dissecting-room, and to examine the senior students from time to time upon the subjects of the lectures.

The College expenses, including commons, chamber rent, and servants' wages, but exclusive of lecture-fees, do not exceed 50*l.* for the three terms.

The composition fee to be paid for the courses of lectures is forty-five guineas.

HOSPITAL PRACTICE.—QUEEN'S HOSPITAL, BATH ROW.

Fees for Medical, Surgical, Midwifery, Ophthalmic, and Dental Practice, and to the Clinical Lectures:—Attendance for three years, or the period required by the College of Surgeons, on the medical, surgical, midwifery, ophthalmic, and dental practice, and on the clinical lectures, 21*l.* ; one year's attendance, ditto, 10*l.* 10*s.* ; six months' attendance, ditto, 6*l.* 6*s.*

The respective offices of physicians' clerk, and surgeons' dressers, assistant prosector of morbid anatomy, obstetric clerks, the ophthalmic and dental assistants, are filled up by the physicians and surgeons from the students for a period of one year after examination, without additional fee.

The hospital contains 160 beds. During the past year relief was afforded to 1,585 in-patients, of which 707 were medical and 878 surgical cases ; and 15,953 out-patients were admitted.

GENERAL HOSPITAL.

Fees.—*Medical Practice*, six months, 7*l.* 7*s.*; twelve months, 10*l.* 10*s.*; eighteen months, 12*l.* 12*s.*; three years, 21*l.* *Surgical Practice*, six months, 8*l.* 8*s.*; twelve months, 10*l.* 10*s.*; eighteen months, 15*l.* 15*s.*; three years, 21*l.*

Dresserships in addition, six months, 8*l.* 8*s.*; twelve months, 12*l.* 12*s.*; eighteen months, 15*l.* 15*s.*; three years, 26*l.* 5*s.*

FELLOWSHIPS, SCHOLARSHIPS, AND PRIZES.

Fellowships.—Such members of the College as hold a diploma in medicine or surgery, or who are graduates in medicine, law, or arts, or such members of the late Birmingham Royal School of Medicine and Surgery as the Council may determine, are, under the Royal Charter, eligible to be "Fellows." The Fellows have power to vote at all meetings of the governors, have free admission to the medical and general library, to the museums, and to the lectures; and likewise are privileged to dine in the College Hall, on payment of a specified sum.

Warneford Medical Scholarships.—Four Medical Scholarships have been founded by the Rev. Dr. Warneford, to the value of 10*l.* each, to be held for two years; to be conferred upon the students who have resided in the College at least twelve months, who have been distinguished for their diligence and good conduct, who have been regular in their attendance on "Divine Service," and whose attendance at the Warneford Lectures has been regular.

Warneford Gold and Silver Medals.—The essays written for these prizes to be "of a religious as well as scientific nature: the subject to be taken out of any branch of anatomical, physiological, or pathological science, to be handled in a practical or professional manner, and according to those evidences of facts and phenomena which anatomy, physiology, and pathology, so abundantly supply; but always and especially with a view to exemplify or set forth, by instance and example, the wisdom, power, and goodness of God, as revealed and declared in Holy Writ."

The Founder's Scholarship.—To encourage and reward a good general education in medical students entering the College, a scholarship of 10*l.* per annum, tenable for two years, has been instituted by William Sands Cox, F.R.S. There must not be less than three competitors.

Honorary Medals are annually given, on a public examination, for proficiency in the respective departments of medical science.

Clinical Medical Prize.—The Council is enabled, by the liberality of Professor Dr. Wade, to offer a prize of five guineas for regularity of attendance on the medical practice of the Queen's Hospital, and the medical clinical lectures, together with the best report of medical cases occurring in his practice.

Clinical Surgical Prize.—The Council is enabled, by the liberality of Professor Sands Cox, to offer a prize of five guineas for regularity of attendance on the surgical practice of the Queen's Hospital, and the surgical clinical lectures, together with the best report of surgical cases occurring in his practice.

The Percy Prize.—The Council is enabled, by the liberality of Dr. Percy, Professor of Metallurgy, Government School of Mines, to offer books of the value of five guineas, to the students attending lectures in German, who may pass the best examination in two German works.

The Clay Prize.—The Council is enabled, by the liberality of Professor Clay, to offer books of the value of five guineas to the student attending

lectures in French who may pass the best examination in two French works.

Warneford Theological Scholars (four in number, 10*l.* each) are awarded at the close of the Trinity term to those in-students, of not less than three terms' standing, who shall in the judgment of the Committee be most deserving.

BIRMINGHAM.—SYDENHAM COLLEGE.

WINTER SESSION.

Anatomy and Physiology.—Drs. R. C. R. Jordan and E. Bartleet. *Anatomy, Descriptive and Surgical*.—Messrs. G. Elkington, F. Jones, and D. Johnson. *Principles and Practice of Medicine*.—Drs. B. Fletcher and J. Russell. *Principles and Practice of Surgery*.—Messrs. A. Baker and D. Bolton. *Surgical Pathology*.—Mr. O. Pemberton. *Dental Surg. and Physiol.*—Mr. T. Howkins. *Chemistry*.—Dr. A. Hill.

SUMMER SESSION.

Midwifery and the Diseases of Women and Children.—Dr. F. Elkington. *Materia and Therapeutics*.—Mr. J. Bassett. *Practical Chemistry*.—Dr. A. Hill. *Botany, Systematic and Structural*.—Mr. F. Westcott. *Forensic Medicine*.—Dr. Hill and Mr. T. Swain. *Medical Tutor*.—Mr. James Beddard. *Classics and Mathematics*.—Mr. Bates.

The students have the use of the reading-room and the library. They have also access to the museums of anatomy, physiology, and pathology, as well as those of chemistry and materia medica. The diagrams, models, and plates, illustrative of the various courses of lectures, may be used by them, under certain rules, with which they will be made acquainted.

In addition to the obstetric preparations in the museum, the collection belonging to the Lying-in Hospital, will be made accessible to the students under suitable regulations.

The Dissecting-rooms are open from eight in the morning until eight at night, and the pupils have the benefit of a constant superintendence in their dissections.

Clinical Courses will be given by those lecturers who are attached to the various public institutions of the town. The lectures are so arranged that no interference with attendance upon hospital practice will be caused by them. Prizes will be awarded in each class, under fixed regulations; and a Council Prize will also be given for general proficiency.

Some of the lecturers will receive students into their houses; and parents or guardians are requested to communicate with the Principal before placing students at lodgings.

BIRMINGHAM GENERAL HOSPITAL, SUMMER LANE.

Established 1772, contains 240 beds. Upwards of 20,000 patients received medical and surgical relief during last year.

It affords opportunities for the practical study of medicine and surgery equal to any similar institution in the kingdom, and from the nature of the manufactories by which it is surrounded, and proximity of the mining districts, some of the most important accidents are constantly being admitted.

Clinical Prizes will be given by Dr. Fletcher and Mr. Alfred Baker for faithful reports of cases under treatment in the hospital.

Fees for Medical and Surgical Pupils.—*Medical Practice*, two years

(the term required for the Licence of the College of Physicians and the Society of Apothecaries), 12*l.* 12*s.* ; *Surgical Practise* three years (the term required by the Royal College of Surgeons), 21*l.*

By the regulations of the hospital, each student is required to fill the office of Dresser and Clinical Clerk.

BRISTOL MEDICAL SCHOOL,

WINTER SESSION.

Medicine.—Dr. Brittan. One course, 4*l.* 4*s.* ; perpetual, 6*l.* 6*s.*

Surgery.—Mr. Prichard. One course, 4*l.* 4*s.* ; perpetual, 6*l.* 6*s.*

Chemistry.—Mr. Herapath. One course, 5*l.* 5*s.* ; perpetual, 8*l.* 8*s.*

General Anatomy and Physiology.—Drs. Martin and Fripp. One course 5*l.* 5*s.* ; perpetual, 9*l.* 9*s.*

Descriptive and Surgical Anatomy.—Mr. Coe and Mr. Leonard. One course, 5*l.* 5*s.* ; perpetual, 9*l.* 9*s.*

Dissections.—Superintended by Mr. Lansdown, Mr. Winter, and Mr. Atchley.

SUMMER SESSION.

Botany.—Mr. T. E. Clark. One course, 3*l.* 3*s.* ; perpetual, 5*l.* 5*s.*

Materia Medica.—Dr. Burder. One course, 4*l.* 4*s.* ; perpetual, 6*l.* 6*s.*

Midwifery.—Dr. Swayne. Wednesday, at 10 a.m. One course, 4*l.* 4*s.* ; perpetual, 6*l.* 6*s.*

Forensic Medicine.—Dr. Marshall ; and *Chemical Toxicology*, Mr. Herepath. One course, 3*l.* 3*s.* ; perpetual, 5*l.* 5*s.*

Practical Chemistry.—Mr. Herepath. One course, 3*l.* 3*s.*

Fee for perpetual attendance on all the above courses, excepting practical chemistry, 47*l.* 5*s.*

The courses of lectures upon the Principles and Practise of Medicine and Surgery will be illustrated by preparations from the museum, as well as by numerous morbid specimens and cases from the practice of the Bristol Royal Infirmary.

The lectures upon General Anatomy and Physiology will be accompanied by numerous microscopic demonstrations, and further elucidated by an extensive series of diagrams and specimens from human and comparative anatomy.

The students attending the course of Descriptive Anatomy will have every facility for devoting themselves to Practical Anatomy in the dissecting-rooms, under the superintendence of the demonstrators.

The Chemical Lectures are illustrated by experiments, and by a large collection of specimens, both organic and inorganic.

The Midwifery course will be illustrated by a valuable series of specimens from the museum ; and the pupils attending it, when properly qualified, will be amply supplied with cases.

The collection of Materia Medica, to which students attending this course have free access, is good and complete.

The students of the Botanical Class attend the lecturer on herborizing excursions. Vegetable Physiology is made a prominent part of the course, and diagrams, as well as microscopical preparations of vegetable tissue, are used in illustration of the subject.

Competitive examinations are held amongst students of the first, second, and third years respectively, and prizes in books, instruments, and money, are annually awarded, to the value of about 40*l.*

MEDICAL AND SURGICAL HOSPITAL PRACTICE.

The Medical and Surgical Hospital Practice of the Bristol Royal Infirmary, and of the Bristol General Hospital, is in conformity with the regulations of the various Examining Boards, and the hours of attendance and of Clinical Lectures are so arranged, as to suit those of the Medical School.

BRISTOL ROYAL INFIRMARY.—The Infirmary contains 242 beds. The number of in-patients last year was 2,945; the number of out-patients, 16,254. The fees are as follows:—Surgeon's pupil, for one year, 12 guineas; for two years (at one payment), 20 guineas; for three years (at one payment), 25 guineas. Dresser (extra fee) for one year, 12 guineas; for two years (at one payment), 20 guineas; for three years (at one payment) 25 guineas. Physician's pupil, for six months, 8*l.*; one year, 15*l.*; eighteen months 20*l.*; perpetual, 25*l.* The dressers reside in the house in weekly rotation, free of expense, to attend upon the casualties, and have unusual opportunities of becoming practically acquainted with the treatment of injuries and surgical maladies of all kinds. Each physician appoints one of his most diligent pupils as Clinical Clerk without extra fee. Each pupil is required to pay an entrance fee to the infirmary, of five pounds, and a subscription of one guinea per annum to the library. Two prizes, each consisting of a gold medal, and seven guineas in money, are annually distributed to the successful candidates among the pupils of the infirmary, after examinations by the Physicians and Surgeons.

BRISTOL GENERAL HOSPITAL.—The hospital contains 130 beds. The number of in-patients treated during the past year, was 1,280; the number of out-patients, 16,860. The fees are as follows:—Medical or surgical Practice, for six months, 6*l.*; one year, 10*l.*; perpetual, 20*l.* Extra fee for Dresser or Clinical Clerk, for six months, five guineas. Library fee, one guinea per annum. Dressers reside in the hospital in weekly rotation, free of expense. They have the privilege of attending to all the minor casualties, as well as of assisting in the treatment of the severer accidents. Clinical Clerks receive private instruction from their respective Physicians, and have the privilege of examining and recording cases for themselves. Two scholarships, founded by the Rev. Canon Guthrie and H. M. Clarke, Esq., and consisting each of 15*l.*, are awarded annually to the most diligent students of the hospital.

CAMBRIDGE MEDICAL SCHOOL.

WINTER SESSION.

Principles of Pathology and Practice of Medicine.—Dr. Bond. Unlimited, 5*l.* 5*s.*

General and Comparative Anatomy and Physiology.—Dr. Clark. 2*l.* 2*s.*

Human Anatomy and Physiology.—Dr. Humphry. Unlimited, 5*l.* 5*s.*

Superintendence of Dissections.—Mr. Helm.

Chemistry.—Prof. Liveing.

SUMMER SESSION.

Surgery.—Dr. Humphry. 3*l.* 3*s.*

Botany.—Prof. Babington. 2*l.* 2*s.*

Materia Medica and Therapeutics.—Dr. Fisher. 2*l.* 2*s.*

Practical Chemistry.—Prof. Liveing. 4*l.* 4*s.*

Clinical Lectures are delivered weekly at Addenbrooke's Hospital.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

Established 1740. 120 beds.

Phys., Drs. Bond, Paget, and Latham.—*Surgs.*, Messrs. Lestourgeon, Hammond, and Dr. Humphry.—Fees for attendance for unlimited period, fifteen guineas; for one year, ten guineas; for six months, eight guineas.

HULL AND EAST RIDING SCHOOL OF MEDICINE AND ANATOMY.--KINGSTON-SQUARE.

WINTER SESSION.

Anatomy, Physiology and Pathology.—Mr. R. M. Craven. Sessional, 5*l.* 5*s.*; perpetual, 8*l.* 8*s.*

Anatomical Demonstrations.—Dr. King. Sessional, 4*l.* 4*s.*; perpetual, 6*l.* 6*s.*

Principles and Practice of Medicine.—Dr. Daly. Sessional, 5*l.* 5*s.*; perpetual, 7*l.* 7*s.*

Principles and Practice of Surgery.—Mr. J. H. Gibson. Sessional, 3*l.* 3*s.*; perpetual, 5*l.* 5*s.*

Chemistry.—Mr. Walton. Sessional, 5*l.* 5*s.*

SUMMER SESSION.

Midwifery and Diseases of Women and Children.—Mr. H. Gibson. Sessional, 4*l.* 4*s.*; perpetual, 6*l.* 6*s.*

Materia Medica and Therapeutics.—Messrs. Arden and Holden. Sessional, 5*l.* 5*s.*; perpetual, 7*l.* 7*s.*

Forensic Medicine and Histology.—Dr. Munroe. Sessional, 3*l.* 3*s.*; perpetual, 7*l.* 7*s.*

Botany.—Mr. Niven. Sessional, 3*l.* 3*s.*; perpetual, 7*l.* 7*s.*

Practical Chemistry.—Mr. Walton. Sessional, 2*l.* 2*s.*

Perpetual to all the lectures, except Chemistry, 42*l.*

The Library is open to students by an annual payment of 10*s.*

HULL GENERAL INFIRMARY.

Established 1783. 150 beds.

Cons. Phys., Dr. H. Sandwith.—*Cons. Surg.*, Mr. F. Huntington.—*Phys.*, Sir H. Cooper, and Dr. O. Daly.—*Surgs.*, Dr. Lunn, Mr. R. M. Craven, and Dr. King.

Clinical Lectures will be given at the hospital twice a week. Medicine, Sir H. Cooper, and Dr. Daly; on Surgery, by Dr. Lunn, Mr. Craven, and Dr. King.

Perpetual fee for attendance on the medical and surgical practice, 21*l.*
Clinical lectures, 1*l.* 1*s.*

LEEDS SCHOOL OF MEDICINE.

WINTER SESSION.

General Anatomy, Physiology, and Pathology.—Messrs. Ikin and C. G. Wheelhouse. First session, 4*l.* 4*s.*; second session and perpetual, 3*l.* 3*s.*

Anatomy.—Messrs. T. P. Teale, jun., E. Atkinson, and J. Scaton. First session, 6*l.* 6*s.* ; second session and perpetual, 5*l.* 5*s.*

Principles and Practice of Surgery.—Messrs. Nunneley, and S. Hey. First session, 4*l.* 4*s.* ; second session and perpetual, 3*l.* 3*s.*

Chemistry.—Messrs. Scattergood and R. Reynolds. First session, 4*l.* 4*s.* ; second session and perpetual, 3*l.* 3*s.*

Principles and Practice of Physic.—Drs. Chadwick and Heaton. First session, 5*l.* 5*s.* ; second session and perpetual, 3*l.* 3*s.*

Demonstrator.—Mr. T. P. Teale, jun.

SUMMER SESSION.

Materia Medica and Therapeutics.—Mr. Bishop. First session, 4*l.* 4*s.* ; second session and perpetual, 2*l.* 2*s.*

Midwifery and Diseases of Women and Children.—Messrs. Smith and W. N. Price. First session, 4*l.* 4*s.* ; second session and perpetual, 2*l.* 2*s.*

Forensic Medicine and Toxicology.—Dr. P. Smith. First session, 3*l.* 3*s.* ; second session and perpetual, 1*l.* 11*s.* 6*d.*

Practical Chemistry.—Mr. Scattergood. 2*l.* 2*s.* each course.

Botany.—Mr. W. Hall. First session, 3*l.* 3*s.* ; second session and perpetual, 1*l.* 11*s.* 6*d.*

Operative Surgery.—Mr. Nunneley, and Mr. S. Hey.

Fee to all the courses required by the Examining bodies, except Practical Chemistry, 42*l.*

LEEDS GENERAL INFIRMARY.*

Established in 1767. 142 beds.

Phys., Drs. Chadwick and Heaton—*Surgs.*, Messrs. S. Smith, T. P. Teale, and S. Hey. *Clinical Lectures* at the General Infirmary, twice a week, on Medical Cases, by Drs. Chadwick, Heaton, and Hardwick ; and on Surgical Cases, by Messrs. Smith, T. P. Teale, and S. Hey. On Ophthalmic and Aural Practice, at the Eye and Ear Infirmary, by Mr. Nunneley.

Medical Libraries are connected both with the school and the infirmary

Clinical Clerkships and Dresserships.—Three Clinical Clerkships and Dresserships are at the disposal of the physicians and surgeons to the General Infirmary, and are gratuitous.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

WINTER SESSION.

Anatomy, Physiology, and Anatomical Demonstrations.—Mr. Fletcher, Dr. Waters, and Dr. Graham, Demonstrator of Anatomy. One course, 8*l.* 8*s.*

Chemistry and Pharmacy.—Dr. J. B. Edwards. One course, 5*l.* 5*s.*

Principles and Practice of Medicine.—Dr. Cameron. One course, 5*l.* 5*s.*

Principles and Practice of Surgery.—Mr. Long. One course, 5*l.* 5*s.*

* No return has reached us from the Leeds Infirmary or Medical School. In this and similar instances, any inaccuracy must be attributed to others, not to ourselves.

SUMMER SESSION.

Materia Medica and Therapeutics.—Dr. Nevins. One course, 4*l.* 4*s.*

Botany.—Dr. Collingwood. One course, 3*l.* 3*s.*

Midwifery and Diseases of Women and Children.—Mr. Batty and Dr. Grimsdale. One course, 4*l.* 4*s.*

Medical Jurisprudence.—Drs. E. Whittle and Edwards. One course, 3*l.* 3*s.*

Practical Chemistry.—Dr. Edwards. One course, 3*l.* 3*s.*

Ophthalmic Medicine and Surgery.—Dr. R. H. Taylor. One course, 1*l.* 1*s.*

Pathological Anatomy.—Dr. Gee. One course, 1*l.* 1*s.*

Dental Surgery and Mechanics.—Mr. Snape.

Fee to all the lectures required by the Colleges of Physicians and Surgeons, and Apothecaries' Hall (including Practical Chemistry), 45*l.*, payable in advance.

ANNUAL EXHIBITIONS.

Royal Infirmary Medical Scholarship, value 42*l.*, consisting of a gold medal, value 10*l.* 10*s.*, and six months' free board and residence, with Dressership and Clerkship in the Royal Infirmary. In case the scholarship is gained by a resident pupil, six months' payment (31*l.* 10*s.*) will be returned to him.

Four Exhibitions, value 31*l.* 10*s.* each, consisting of free board and residence in the Royal Infirmary for six months, with Dressership, on award of the Medical Board.

LIVERPOOL ROYAL INFIRMARY.

Established in 1749. 240 beds.

Cons. Phys., Drs. Formby and Dickinson.—*Phys.*, Drs. Vose, Turnbull, and Inman.—*Cons. Surqs.*, Messrs. Dawson and Halton.—*Surqs.*, Messrs. Stubbs, Ling, and Bickersteith.

Fees for Medical and Surgical Practice.—For six months, 10*l.* 10*s.* ; for the first year, 18*l.* 18*s.* ; for the second year, 12*l.* 12*s.* ; for the third, 10*l.* 10*s.* ; for three years, 36*l.* 15*s.* *No additional fees whatever.*

MANCHESTER ROYAL SCHOOL OF MEDICINE AND SURGERY.

Faulkner-street (behind the Royal Infirmary).

WINTER SESSION.

Physiology.—Messrs. T. Turner and W. Smith. *Descriptive Anatomy*.—Mr. E. Lund and Mr. F. A. Heath. *Practical Anatomy*.—Mr. Leech. *Chemistry*.—Mr. D. Stone. *Principles and Practice of Medicine*.—Dr. Roberts. *Principles, Practice, and Operations of Surgery*.—Mr. G. Southam. *Anatomy, Physiology, and Pathology of the Eye*.—Messrs. R. T. Hunt and E. Lund.

SUMMER SESSION.

Midwifery and Diseases of Women and Children.—Mr. G. Greaves. *Materia Medica, Medical Botany, and Therapeutics*.—Mr. A. Somers. *General*

Pathology and Morbid Anatomy.—Dr. Morgan. *Forensic Medicine.*—Mr. G. M. Harrison. *Botany.*—Mr. L. Grindon. *Practical Chemistry.*—Mr. D. Stone.

HOSPITAL PRACTICE.

At the Royal Infirmary, where Clinical Lectures on Medicine and Surgery are regularly delivered by the physicians and surgeons of the institution.

Scholarships.—Three Scholarships for perpetual pupils will be offered for competition during the session :—One of 20*l.* for third year's students ; one of 15*l.* for second year's students ; one of 10*l.* for first year's students.

Prizes are annually awarded for general proficiency.

Connected with this school are museums of human and comparative anatomy and materia medica, a chemical laboratory, a library, and a medical society.

Perpetual Fee to the whole of the lectures, forty guineas.

MANCHESTER ROYAL INFIRMARY AND DISPENSARY.

Established in 1752. 230 beds, and fever wards, 40 beds. *Consulting Physicians*, Drs. Sir J. L. Bardsley, and P. Wood ; *Physicians*, Ainsworth, Wilkinson, Renaud, Watts, Browne, and Roberts ; *Consulting Surgeon*, Mr. Turner ; *Surgeons*, Messrs. Jordan, Ransome, Beever, W. Smith, Dunville, and Southam ; *Dispensary Surgeons*, Messrs. Heath, Lund, and Bowring ; *Visiting Apothecaries*, Messrs. Lynch and Standring. In-patients, 2,000 ; out-patients, 20,000.

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, NEWCASTLE-UPON-TYNE.

WINTER SESSION.

Physiology.—Dr. D. Embleton. *Anatomy.*—Dr. T. F. McNay. *Dissections.*—Dr. W. Murray. *Principles and Practice of Physic.*—Dr. E. Charlton. *Principles and Practice of Surgery.*—Dr. G. Y. Heath. *Principles of Chemistry.*—Dr. T. Richardson.

SUMMER SESSION.

Botany and Vegetable Physiology.—Mr. J. Thornhill. *Medical Jurisprudence.*—Dr. A. S. Donkin. *Materia Medica and Therapeutics.*—Dr. T. Humble. *Midwifery and the Diseases of Women and Children.*—Drs. S. M. Frost, W. Dawson, and C. Gibson. *Operative Surgery.*—Dr. G. Y. Heath. *Military Surgery.*—Sir John Fife. *Practical Chemistry.*—Dr. T. Richardson and Mr. E. J. J. Browell. *Pathological Anatomy.*—Dr. S. Fenwick and Dr. C. J. Gibb. *Medical Tutor.*—Dr. W. Murray.

Fees for Lectures.—Perpetual fee for all the lectures, payable on entering to the first winter session, is forty-four guineas.

HOSPITAL PRACTICE.

THE NEWCASTLE INFIRMARY contains 230 beds. Clinical lectures are regularly delivered. According to the last report, 1,512 in-patients, 1,918 out-patients, and 10,566 casual patients were attended at this institution.

Fees for Medical and Surgical Practice.—Twelve months, seven guineas ;

six months, five guineas ; three months, four guineas ; perpetual, seventeen guineas. An extensive library is open to the students attending the Infirmary.

Midwifery can be attended at the Newcastle Lying-in Hospital. Perpetual fee, two guineas.

Clinical Clerkships.—There are two resident and two non-resident Clinical Clerks, selected by the Medical Board (by examination) from among the most meritorious of the students, to hold office for six months. The resident clerks pay 10*l.* 10*s.* for their board.

Dresserships are at the disposal of the surgeons of the Infirmary, and are gratuitous.

The *Museum* of the College will be open daily, for the use of students. *Curator*, Dr. W. Murray.

Medical Scholarships in the University of Durham. The following grace was passed in convocation of the University, June 17th, 1856: "Four Scholarships of 25*l.* a-year each shall be founded, tenable each for four years by students pursuing their medical studies in the University or at Newcastle, and not of sufficient standing to proceed to a Licence in Medicine."

SHEFFIELD MEDICAL INSTITUTION.

WINTER SESSION.

General Anatomy and Physiology.—Messrs. Skinner, Allanson, and Dr Keeling. One course, 4*l.* 4*s.*

Practical Anatomy and Demonstrations.—Mr. H. Walker. One course, 2*l.* 2*s.*

Principles and Practice of Medicine.—Dr. Bartolomé. One course, 4*l.* 4*s.*

Principles and Practice of Surgery.—Mr. Barber and Mr. W. F. Favell. One course, 3*l.* 3*s.*

Chemistry.—Dr. Bingley. One course, 6*l.* 6*s.*

SUMMER SESSION.

Botany.—Mr. Birks. One course, 3*l.* 3*s.*

Midwifery and the Diseases of Women and Children.—Mr. Arden. One course, 3*l.* 3*s.*

Materia Medica and Therapeutics.—Mr. Kemp. One course, 4*l.* 4*s.*

Medical Jurisprudence.—Mr. Griffiths. One course, 3*l.* 3*s.*

Clinical Lectures are given by the physicians and surgeons at the Infirmary.

The fees for all the lectures will not exceed 42*l.* This, however, is exclusive of the fee for Practical Chemistry, which must be subject to special arrangement with the Lecturer.

SHEFFIELD GENERAL INFIRMARY.

Established in 1697. *Honorary Physicians*, Sir A. J. Knight, M.D., and Drs. Holland and Bransom ; *Honorary Surgeons*, Messrs. Thomas and Overend ; *Physicians*, Drs. Thompson, De Bartolomé, and Elam ; *Surgeons*, Messrs. Jackson, Barker and Favell. No. of beds, 150.

OPENING OF THE ENGLISH MEDICAL SCHOOLS.

The Winter Session at many of the English Schools of Medicine will be commenced on October 3rd, in consequence of October the 1st, which is the day on which the Session usually commences, falling on Saturday.

The following is a list of the Introductory Lectures, of which notice has reached us, and of the gentlemen by whom they will be delivered.

Medical School.	Lecturer.	Time of Lecture.	
St. Bartholomew's	Mr. Callender	Oct. 3	5 p.m.
St. George's	Dr. Page	Oct. 3	2 p.m.
Guy's.....	Dr. J. B. Hicks, F.R.S.	Oct. 1	2 p.m.
King's College.....	Prof. Cartwright	Oct. 1	8 p.m.
London	Dr. L. Down	Oct. 3	3 p.m.
St. Mary's.....	Mr. Toynbee, F.R.S.	Oct. 1	8 p.m.
Middlesex.....	Dr. Greenhow	Oct. 3	8 p.m.
St. Thomas's.....	Dr. Clapton	Oct. 1	3 p.m.
University College	Prof. Quain, F.R.S.	Oct. 3	3 p.m.
Westminster.....	Dr. Basham	Oct. 3	8 p.m.
Queen's Coll., Birmingham...	Prof. Anderson.....	Oct. 4	noon
Manchester	Mr. Stone	Oct. 4	noon

OPENING OF THE SCOTCH AND IRISH MEDICAL SCHOOLS.

Varying from the English custom, the Winter Session at the Medical Schools in Scotland and Ireland commences in the month of November. The arrangements of the Winter Courses of Lectures, and the Lecturers by whom they will be delivered, is not yet completed at some of these institutions, but in our next number we shall give complete information respecting these and other particulars of interest in connection with Medical Education in Scotland and Ireland.

THE MEDICAL MIRROR.

OCTOBER, 1864.

ORIGINAL COMMUNICATIONS.

Remarks on Some of the Effects of Tropical Climates on the European Constitution. By WILLIAM MARTIN, F.R.C.S., late Surgeon, Bengal Army, and to the Calcutta Eye Infirmary, &c.

THE subject on which I propose to offer some remarks is so extensive, that I should not find space readily to do justice to it, but as it is one of considerable importance, I have ventured to bring certain points before the profession, with the view of helping to elucidate certain facts and theories bearing upon the every-day practice of our art. In doing this, I have nothing particularly novel to bring forward. The subject has been treated, for a long series of years, on detached points, more particularly by medical officers attached to the army and navy, who in the British service have had, from the marvellous extension of our colonial empire, unwonted opportunities of observing the effects of all varieties of climates. Of these the most noted are Lind, Jackson, Clark, Fergusson, Johnson, Annesley, Twining; and of late years, in a more systematic form, other writers have combined, in an eminent degree, an extended experience of their own, with an accurate acquaintance with the writings of other observers. Among these, I may mention two of the most recent and most eminent writers, Sir J. R. Martin and Dr. Morehead, the former of whom has not only given the profession the benefits of his long experience of disease, as observed in India, but has also become the leading authority on the subject of diseases of returned Indians; while the latter still more recently enriched our literature with a series of most valuable researches on the diseases of Indian residents, and the effects

of treatment both upon Europeans and natives. From these and kindred works, I have not hesitated to borrow many facts and ideas, and in comparing them with the observations my own service in India has enabled me to make, I have come to some conclusions which I have thought might be interesting and important as guides to practice, and as throwing light upon analogous points in the climatic effects observable at home. My remarks will be principally confined to India, and the diseases and phenomena of other tropical countries, as the West Indies, will be only incidentally touched upon, as I have no personal experience to record with regard to them.

It has often been made matter of remark, that man is far more capable of sustaining the changes consequent on diversities of climate, than any other animal; but a sufficient distinction has not always been made, as to the causes of this greater power of adaptability, how far they arise from physical agencies, *i. e.*, the physical conformation and attributes of man, and how far they arise from moral agencies, *i. e.*, man's own efforts to guard against the noxious influences of excessive vicissitudes of climate. It appears to me that sufficient weight has not been given to the latter. It has been generally thought that human beings, if transported to a totally different climate, as from our own European, to that tropical one of India, for instance, need no extraordinary precautions to be taken, in order that they should have a fair chance of preserving health; that their constitution will, as a matter of course, adapt itself to the change, and that they ought to have, *cæteris paribus*, as good health, as in their native clime. It is true this has not been the opinion of the reflecting surgeon, but it is that which has been acted upon by the great mass of residents, at any rate in the early period of their residence in warm climates; and it is to this misapprehension and ignorance, that we may attribute a portion—probably a large proportion—of the diseases from which Europeans suffer, and the natives of those climates do not suffer.

Of late the opinion has gained ground that it falls within the province of the physiological surgeon to insist, more than formerly, upon the absolute necessity of the European visitor to a tropical climate taking special sanitary precautions, if he would expect even to have tolerable health. We shall feel convinced of this, when we reflect that while in many instances the lower animals obtain new clothing, more or less abundant, as the climate or the season varies, man receives none; and it is a well-established fact, that of those Europeans who make India their residence, a considerable propor-

tion droop and die, or are forced to seek their native air, and with regard to those who become acclimatised, their progeny has, as far as I am aware, in no instance survived to the third generation, *i.e.*, no three successive generations of pure European race have been known to survive. The same, no doubt, would be the case with regard to the natives of tropical climates, who might come to reside in Europe. These also are subject to dangerous diseases, more especially of the lungs, which carry off large numbers, whereas the Europeans in the tropics, find diseases of the liver, and chylopoietic viscera more especially fatal to them. We cannot then confide, with safety, in the spontaneous efforts of the human constitution to take on the changed conditions rendered necessary by its being subjected to new climatic influences, but we must adapt our habits and take special precautions to assist nature, or at any rate to avoid impeding its acclimatising operations. With this view, we must pay attention to all incipient deviations from health, in order to cure them, or arrest them sufficiently early to escape the dangerous consequences to which they otherwise inevitably lead.

One of the first changes caused by the removal of a European to a tropical climate, is that of the function of the skin; the perspiration being in most cases greatly increased, sometimes to an inordinate degree. If it be only moderately increased, as is the case with Europeans arriving in India during the winter, when the average temperature may equal that of one of our cool summers, and with those who have become acclimatised, on the approach of each hot season, it affords the greatest relief to the system. An increased amount of perspiration, compared with what obtains in cold regions, for residents in warm climates, must be considered the normal condition. The secretion of the liver is also, in a large majority of cases, increased in the early period of residence, and this is to be considered always as a morbid process to be carefully watched, and, if possible, guarded against; and where it occurs, it must be reduced within due bounds, or it will become a fruitful source of disease, at first functional, eventually, in all probability, organic. It is with respect to this function of the liver that so much caution is required by visitors to warm climates, for on its perversion depends in great measure the amount of derangement of health which occurs among them. On the other hand, the action of the lungs becomes lessened, chiefly if not entirely, in consequence of the increased action of the skin. The great effect this must have, we perceive, when we reflect, that although from the rarefaction of the atmosphere in a hot climate, the lungs must become expanded to a certain

extent, yet that this rarefaction is occasioned solely by the increased temperature, and not by diminished atmospheric pressure, as we find to be the case in elevated regions. Consequently the amount of oxygen to be taken in is rather diminished than otherwise, and all the parts concerned in the process of respiration are not called into more vigorous action as they would be in a hilly country, but the reverse; the result of this and of the increased amount of perspiration, is that the work of the lungs is lessened, and this to a considerable extent; so much so, that a most material relief is afforded to the entire system, and if the new arrival be very cautious as to his habits, and particularly the diet, and only so much food of the proper kind be taken as will be digested and assimilated with ease, and the excretions through the lungs, skin, liver and other organs, only task the power of those organs moderately, he may perhaps have nearly as good a chance of preserving health as if he continued to reside in Europe. Should he be naturally inclined to pulmonary disease, the amount of relief to the system afforded in India by the diminished pulmonary action is so great, that he often will enjoy better general health than he did in his native clime, and even will have his life preserved by his change of residence.

The influence of the increased heat of tropical countries upon the skin, in augmenting the amount of perspiration, is so well known, that it does not require expatiating upon; but we may remark that this increase may exist, and often through bad management to a prejudicial extent. It is possible to exceed in the amount of fluid drank; the perspiration after being inordinately increased, may be suddenly checked; and this counteraction may be in its ultimate effects as dangerous as another condition of the skin, which leads to consequences more directly fatal, in which the perspiration, at a time of excessively sultry heat, becomes suppressed, as is seen to be the case previously to attacks of sunstroke, or insolation; more properly called heat asphyxia. In persons of intemperate habits, an inordinate perspiration is often produced by the very indulgence in intoxicating substances. The system is then left in such a condition that it cannot resist malarious or other noxious agencies; some evil influence will enter the body through the open pores of the cutaneous surface; and the effects of this will be much aggravated by the cooling of the skin, which takes place subsequently, and the rapid contraction of its surface, which renders it incapable of performing its function effectively. In this way seem to arise a large proportion of the deadly diseases so rife in tropical climates; those especially which

arise from malaria, also non-malarious dysentery, continued and remittent fevers, cholera, &c.

The liver is, next to the skin, the organ most altered in its action by transference of residence from a cold to a hot climate. Its action is almost always increased to a certain extent, but if great care be taken by paying due attention to regimen, &c., this will pass off, in most cases, in a short time, if the new arrival commences his residence in the hot season, and the skin, with the action of which that of the liver is vicarious, acts freely for a continuance. If he begins his residence in the cold season, he may escape any over-action of the liver altogether; or if it occurs, it will be less in degree, and will be more tractable than in the other case. This increased action is of the nature of functional derangement, and is no doubt attributable to hyperæmia of the organ. This causes at first increased secretion simply, with sympathetic functional derangement of the stomach, and probably of the skin, lungs, &c. If this be speedily checked, and everything is favourable as regards season, and non-malarious condition of the atmosphere, &c., things will return to their original state; otherwise, structural degeneration may occur; but more often than that, there remains a functional derangement of the liver, involving changes of other functions; particularly those with which the liver sympathizes; alteration of the constitution of the blood, &c. The derangement is often of such a serious nature, that a proper acclimatization in India is rendered impossible, and change of climate of some kind becomes necessary. In milder cases, the over-action of the liver is succeeded by a corresponding torpor; and this again, while the constitution retains its vigour, by a fit of over-excitement; these opposite conditions alternating for some time. Consequently, there is always an irregular and vitiated state of the biliary secretion, with its necessary concomitants, impairment of the nutritive and nervous functions of the body generally. This state of hyperæmia of the liver, although produced in the first instance by increased temperature, is kept up very often by local influences, such as produce malaria. In fact, it exists to a greater extent in comparatively cool weather, as in the rainy and cold seasons in India, than in the hottest. In few cases, however, would the exciting cause act, but for the predisposition caused by the increased temperature. Again, in addition to heat, it seems that there must be some influence which arrests the action of the skin, for it has been remarked that in seasons in which the heat has been great, but without moisture, and consequently in which there has been no impediment to a very free action of the skin, there has been an unusual freedom from congested

livers. There is no doubt, however, that long-continued heat, even if dry, will of itself, under certain circumstances, produce a state of hyperæmia.

Acute hyperæmia, or inflammation, often, according to the nature of the exciting causes of disease applied, leads to structural changes, abscess, fatty and other degenerations, &c.; with these may be conjoined the effects of fevers, dysentery, dangerous affections of the kidneys, spleen, &c. Sometimes, there is a protracted condition of chronic hyperæmia, which is too often known only by its effects. The patient experiences nothing perhaps but a general feeling of discomfort, and a state of torpor of the mind and of the functions of the nervous system, and of the principal organs, while organic changes are taking place, which will often be found to be irremediable. Frequently the disease commences in a state of sub-acute hyperæmia, in which there is pain, but not of a severe character, little disturbance of the stomach, only torpor of the chylopoietic functions, with some degree of pyrexia; and this state may merge, according to the nature of any reapplied exciting cause, such as errors in diet, the influence of heat or cold, or wet, or any combinations of these on the patient's peculiar constitution, whether irritable or torpid, into an acute or chronic state of inflammation or hyperæmia. The final results are increase of volume of the liver, sometimes to an enormous extent, or hepatic abscess or exhausting diseases of the bowels; the only chance for saving life being an early change of air, the removal of a European to his native, or at any rate, a milder climate being, with some exceptions, the most likely means to lead to a restoration of health.

On the Mode of Origin of Secondary Cancerous Growths. By H. CHARLTON BASTIAN, M.A., M.B., Lond., F.L.S.; Assist.-Medical Officer, State Asylum, Broadmoor; late Assist.-Curator of Anatomical and Pathological Museum, University College, London.

THE mode of origin in various parts of the body of the so-called "secondary growths," in persons who have laboured under the existence of tumours, or new formations belonging to that class, the members of which are usually styled "malignant," is a question concerning which much has been written, and is, moreover, one concerning which much doubt and uncertainty yet prevails in the mind of the profession. Considering it is a subject so continually and painfully brought under our notice in patients suffering from cancer, it

may, perhaps, be interesting briefly to review the doctrines at present in vogue upon the subject, and ascertain how far they will bear the test of a rigid scrutiny, and whether some of them may not be found in a measure fanciful and unsupported, by what positive or probable knowledge we actually possess for the elucidation of the problem. Although an enquiry of this nature may present many points of interest in a strictly scientific aspect, it can only be deplored that in the present state of our knowledge, a corresponding advantage is not so likely to accrue from it to medicine as an art.

In this communication, I do not propose to enter into anything like a complete review of the question, but merely briefly to discuss the theories promulgated by some of the leading pathologists of the present day; and I propose to speak more particularly concerning the probable mode of origin of such cancerous growth, as have been produced at a distance from the site occupied by the primary new formation, and unconnected with it in any way, either by continuity of tissue, or mere contact of dissimilar parts.

But before commencing our inquiry, it may be well for us to bear in mind, that in judging of the chronicity or age of new formations, it is by no means always easy to ascertain which was antecedent to the other—whether the first formation occurred externally, and was followed by secondary growths in certain internal organs (one or many), or whether the growths in these organs were really primary and unmarked by notable symptoms—as occurs by no means rarely in cancer of the viscera—whilst the external visible growth, though the first seen or suspected, was really secondary. In very many cases, undoubtedly, there is not much difficulty in deciding this matter, but still, occasionally it is not so easy to form an opinion if we take into account the extreme variability in the rate of growth of different cancerous products, and hence the fallacious nature of the evidence presented by mere size and local disorganisation. Then, again, there may, in reality, be no difference in point of time—the two or many growths having as near as may be a simultaneous origin. These cases of coincidence as regards the time of origin of various cancerous growths in different parts of the body will be noticed further on, but now let us see by what means the occurrence of distinctly secondary and distant cancerous masses has been, or may be explained.

The following theories have been advocated by different pathologists to account for the production of this species of new formation:—

First. By inoculation, owing to the actual transference of cancer *cells* from the primary disease to the secondarily

affected part, by means either of the circulation in the (*a*) veins, or in the (*b*) lymphatics, with their arrest and subsequent growth in these situations.

Second. The contamination of the distant part (through the same medium either of blood-vessels or lymphatics) by means of certain *ichorous juices or cancer blastemata*, which are supposed either (*a*) to produce some specific irritating effect upon the natural tissues, or (*b*) to have the power of developing there by acting themselves as germs or rudiments for the production of the new growth.

Third. The formation of the secondary growth, independently altogether of the primary, save and except its being an additional manifestation of an "error of nutrition" similar to that which has caused the first growth, which abnormal tendency may be due either (*a*) to congenital, and perhaps hereditary tendencies in the organism itself, or may be, as it were (*b*) a mere accidental and acquired deviation from the natural laws of growth and development; or, lastly, according to other views, these independent secondary formations are held to be due to the intensity of "blood disease," and consequent dyscrasia.

Let us now briefly consider these various possible modes of origin seriatim:—

I. (*a*.) The genesis of secondary cancer by the cells of the primary growth being conveyed to its new site by means of the blood circulating in the veins, has had, and I believe still has, many adherents. That the veins do sometimes contain cancer, and cancer cells, there can be no doubt, though when this occurs it is no longer believed that the cancer cells are capable of being absorbed by the venous radicles implicated in a cancerous growth in the same mysterious way as it was once believed pus cells were absorbed, in the production of that protean group of symptoms known under the name of pyæmia. Both doctrines have been well nigh consigned to oblivion; but the first condition is now generally admitted to occur from cancerous disease of the walls or lining membranes of the vascular system, and more especially of the veins. In these cases portions of the cancer project into the current of the circulation, and cancer cells are swept off and borne away by the rapidly moving blood. But having said thus much, I know not what more of certain knowledge we can add on this subject, since on following up the theory, we lose the guidance of ascertained facts, and are confronted by many difficulties. In the first place, the theory does not seem to be at all borne out by the usual sites in which we meet with these secondary growths, since the order of their production is by no means coincident with the course of the circulation.

In numberless instances, when if this mode of propagation were potential we should expect to find cancer in the lungs, none is met with, whilst it is found in the liver, where theory does not require its presence. Then, again, granting that cancer cells are swept off into the current of the circulation, and arrested in the capillaries of certain organs, if this is to be the origin of cancerous new formations, what are we required to believe? Certainly things of which hitherto we have not had the slightest approach to what may be considered a distinct proof. We should have, for instance, to believe that one or several cells, separated from the parent formation, retained a sufficient degree of vitality and reproductive power to develop a growth similar to that from which they or it had been derived, and this, too, in a situation where, I believe, as yet, we have no evidence of new formations ever being produced, viz., free and unattached, within the vessels themselves. And if this method of growth seems improbable when the cancerous matter is, as it were, driven into a cul-de-sac in the capillaries, it seems even more improbable that cancer-cells should become fixed, and grow on the inner surface of a large vein in the direct current of the circulation, though even so high an authority as Paget believes that this may occur. He says: "I have spoken of cases in which cancers so grow into veins that we cannot doubt fragments may be washed from them by the blood, and may grow wherever they come to rest;" (Sect. on Surg. Pathol., vol. ii., p. 579.) And, again, speaking of cancerous masses in veins, he says: "There are many in which the growth has only extended into the veins through their walls, involved in cancerous tumours, yet there are others in which, as in the endocardial cancers, the internal growth takes place far from any other tumour. In these we may believe that cancerous structures have been conveyed in the blood to the part of the vein, or of the right side of the heart, at which they have been arrested, and to which adhering (either alone or with blood clot), they have subsisted and grown on materials derived from the passing blood;" p. 536.

(b.) Respecting the transmission of cancer-cells by means of the lymphatics, almost nothing is known, though it seems highly probable that in one way or another they are principally instrumental in bringing about the infection of neighbouring lymphatic glands, which we so commonly meet with. Mr. Paget remarks: "The number of cases in which lymphatics filled with cancer have been traced from the primary growth to the nearest glands is sufficient to make it probable that the disease often thus extends continuously from the one to the other." (Loc. cit. p. 575.) And when

such *continuity of cancer* cannot be traced, he agrees with Mr. Simon in thinking that the lymph may be sufficiently contaminated to set up disease in the glands. It seems to us also, that if cancer is ever reproduced by the transmission of cancer cells from the part primarily affected, and their subsequent growth, that this is far more likely to occur in the lymphatic system than in that of the blood proper, when we take into account the slow and languid current in which they are there immersed, in comparison with the rapid one to which they are exposed in the blood-vessels; and in this lymphatic system the cortical loculi of the lymphatic glands would seem to afford a haven and place for development freest from all disturbing influences. Although, therefore, it appears not only probable, but borne out by actual observation, that neighbouring parts may be infected through the agency of the lymphatics, yet still, as pointed out by Virchow, solid elements would necessarily be arrested at the first gland, and thus the progress of the cancer would be stayed till this, in its turn, acted as a fresh centre of infection.

II. (a.) Prof. Virchow is the great advocate of the opinion that secondary cancerous growths are produced by means of a specific irritation set up in the affected part or organ by certain ichorous juices derived from the primary cancer, and circulating with the blood. He says, speaking of the mode of propagation of secondary cancer both in adjacent and remote parts,—“there is one circumstance which especially favours the extension of such processes, namely, the abundance of the *parenchymatous juices* in the pathological formation.” (Cellular Pathology; transl. by Chance, p. 218.) And, again, after alluding to the improbability of infection occurring from the actual transference of cells in the current of the circulation, because the progress of the infection often advances in a direction contrary to that of the current of blood or lymph, “so that after a cancer of the breast, disease of the liver takes place, whilst the lung remains unaffected,” he says;—“The manner in which the metastatic diffusion takes place seems, on the contrary, to render it probable that the transference takes place by means of certain fluids, and that these possess the power of producing an infection which disposes different parts to a reproduction of a mass of the same nature as the one which originally existed.” A little further on he supposes that “an ichorous juice may pass from a cancerous tumour through the lungs without producing any change in them, and yet at a more remote point, as, for example, in the bones of a far distant part, excite changes of a malignant nature;” p. 219. And, lastly, “The forms (of cancer) yielding dry, juiceless masses, are relatively benignant. Those

which produce succulent tissues have always, more or less, a malignant character." P. 485.

Now, in the first place, in examining this hypothesis, do we invariably find that which Virchow seems to lay so much stress upon, namely, that the degree of malignancy of a cancer is to be always measured by the amount of parenchymatous juices which it contains? It appears not, for though Cruvelhier seems to regard cancer of the female breast as having a more than average tendency to affect the system generally, yet we are told by Dr. Walshe, in his elaborate work on "Cancer," that "scirrhus is incomparably the most frequent species of cancer in the breast; encephaloid occurs in rare cases; while colloid, especially as constituting the mass of a tumour, is excessively uncommon." These facts are, I believe, in harmony with the experience of most pathologists, and surely scirrhus is not that form of cancer which contains the largest amount of parenchymatous juices? When cancer exists at the same time in many internal organs, it is true that we usually find it to be of the encephaloid or scirrho-encephaloid type, but then this, I imagine, is capable of receiving another explanation. Even granting, however, that there is invariably found to be that correspondence between the malignancy of a primary cancerous formation and the quantity of its parenchymatous juices, we shall even then find that the hypothesis requires the aid of two or three rather remarkable postulates to lend it support. We have to imagine that this cancerous juice, even when diluted to the extreme degree, that it must be by being mixed with the whole mass of the blood, not only possesses irritating properties capable of exciting certain morbid processes in particular parts of the system, but irritating properties of such a *special* nature as to cause the tissues acted upon to produce a growth similar in general characters to that from which the poisonous blastema was itself derived, and these effects too, be it remarked, are supposed to be produced by a fluid which, for ought we know to the contrary, and which all positive knowledge would lead us to believe (saving the exigencies of certain hypotheses), to be as bland and non-irritating in its nature as any other albuminous or fibrinous fluid in the body. This may at the first glance seem rather a bold assertion, but I think there can be little doubt that the unprejudiced inquirer will assent to its truth as a provisional statement, till real positive evidence shall decide in what manner the cancerous juice differs in composition and influence from other normal or pathological blastemata met with in the animal organism.

(b.) Mr. Paget believes that cancer *blastema* getting into

the current of the circulation and becoming arrested in certain organs, has the power of *developing out of itself* the germs of a new cancerous growth. But how this could be affected, seems almost inexplicable, when we consider that this liquid blastema must necessarily, soon after mixing with the blood, be diffused through this vital fluid and thus be reduced as it were to a solution of extreme tenuity. The same difficulty too presents itself as in the case of the cancer cells, as to how and where any of this blastema could find an undisturbed resting-place in which to develope. Of course the very possibility of such an occurrence as the origination of cancer cells out of a perfectly homogeneous blastema, would be strenuously denied by all advocates of the cellular pathology, whose watchword is "*omnis cellula e cellula*."

In connection with these two supposed modes of propagation of cancer, either by means of cells or plasma, may be mentioned the experiments of Lebert and Langenbeck, concerning which Paget says, "There are cases in which by the inoculation of cancerous material into the bodies, or by the injection of such material into the blood of dogs, cancer has seemed to be produced. I think that in a large number of experiments that result has been three times obtained; but it is quite possible that the dogs used for these three experiments were cancerous before the human cancerous matter was injected into them, for cancer is indeed a frequent disease among dogs." (Loc. cit. vol. ii., p. 542). So that it will be seen that but little, if any, support is rendered to the preceding doctrines by the results of these experiments, though they have sometimes been quoted as evidence in their favour.

III. We may also consider these secondary cancerous growths to have been produced in a manner entirely independent of direct influence from the primary formation, and to be developed under the agency of the same conditions that gave rise to the first growth. In many cases, indeed, of nearly simultaneous development of cancer in various parts or organs, the growths must almost necessarily be produced in this independent manner. In the language of the humoral pathologists, who look upon cancers as the "local manifestations of certain specific morbid states of the blood," wherein "are incorporated peculiar morbid materials which accumulate in the blood, and which their growth may tend to increase," this simultaneous or independent development of multiple cancerous growths, would be attributed to the "intensity of the cancerous cachexia."

But it may be explained also in a manner fully in harmony with the general doctrines of the cellular pathology; and

that, too, I think, with the greatest deference for the learned and philosophical founder of this school, without the necessity of having recourse to the supposed irritating effects of cancerous juices. For in reality, what necessity is there for us to resort to other methods to explain the production of these secondary growths, different from those which are supposed to have given origin to the first? They are all tumours or new formations, and hence all alike come, in the apt and terse language of Paget, to be considered not only as hypertrophies, but “parts overgrowing, and as overgrowing with appearance of inherent power, irrespective of the growing or maintenance of the rest of the body, discordant from its normal type, and with no seeming purpose.” The same errors of nutrition—whatever be their nature—that were sufficient by their deviation from the ordinary equable and normal mode of development, to give rise to these local manifestations of abnormal but inherent powers of growth, would surely be adequate to the production of other growths of a similar nature in different parts of the body. It seems difficult to conceive any reason why, when we meet in the body with several new formations of a similar nature, it should be thought necessary—in the face, too, of so many difficulties—to assume that the first has been, in some obscure way, causative of its successors, when we have every right to imagine that the same causes were in operation during their production, as existed and probably helped in the genesis of the first.

Cancerous growths are tumours, and I know not why we should call into requisition agencies different for their production than those which we suppose to be potential in causing the genesis of other so-called “benignant” growths. It seems far more consistent to imagine that the former, like the latter, are in some way local manifestations of increased but misguided formative power, instead of supposing the former, or cancerous growths, to be produced after so exceptional a method as is necessitated by the requirements of the humoral pathology. This, looking upon the blood as the *fons et origo mali*, teaches us to believe that such growths are developed out of a specific blastema, segregated from blood, also specifically diseased, and which has been able to maintain its properties in a latent condition, through all the changes to which the vital fluid is hourly subjected—often through a long course of years—till the time comes when this blastema is poured out, which is to form the nidus and pabulum for the evolution of the malignant new formation. No such complicated phenomena seem necessary to us to account for the production of a simple fibrous tumour, and seem to be

required no more for the formation of cancerous ones, if we only look at the question in such a way as the facts of the case seem to warrant.

Seeing, as we do, from actual observation, how frequently these so-called malignant growths are produced in a multiple manner, we may assume that there is an inherent tendency in the organism to the production of growths of this particular nature; just in the same way as we must suppose something similar to account for the extraordinary number of fatty or fibrous local aggregations, in the cases of multiple tumours of either of these types, which are from time to time met with in the body of the same patient. And the difference between the two cases seems to be this, that whereas in the case of fibrous tumours it is but rarely that such a disposition is manifested, and the progress of the several growths is for the most part slow; whilst, on the other hand, with cancerous products, this seems to be the rule, that the state of system, or tendency in the organism, which results in their formation, is of such an intensity and superior activity, as to lead for the most part to the production of rapidly increasing growths in different parts of the body, either simultaneous or successive. And just as this tendency is capable of producing obvious and sensible alterations in nutrition, so may it also be capable of producing other *obscure and imperceptible* changes in the general nutrition of the body, such as fully to account for those cachectic conditions of the system so often met with, over and above what may fairly be ascribed to the effects of local irritation and ulceration produced by the various growths themselves.

The fact that where many cancerous formations exist in the same body, these are mostly found to be of the encephaloid type, may be only an index of the intensity of the diathesis; which is also borne out by the rapidity of their growth, and by the fact of their scarcely ever passing beyond the cell stage of development, and hence does not at all require that we should have recourse to the agency of their parenchymatous juices to explain this plurality.

We can readily imagine that a tendency of the organism so marked as this is seen to be from its results, may in many cases be handed down from parent to offspring, just in the same way as we see a close resemblance to the parental type in other respects, such as personal appearance, voice, manner, and mental peculiarities. But I see no difficulty either in our imagining that such a tendency or peculiarity of the organism may be also acquired in the course of life, through the slow and steady operation of certain hidden physical agencies operating upon the body; more especially when the activity

of the processes employed in healthy nutrition are on the wane, at that post-meridianal epoch of life in which cancerous growths are most prone to form in the system.

Whilst, however, attempting in this paper thus to account for the production of cancer in distant parts of the body, I would by no means be understood to disbelieve in the possibility of its propagation to neighbouring parts by means of the lymphatics; I merely wished to point out some of the difficulties besetting the old doctrines entertained upon the subject, and also to suggest that there may, perhaps, be really no occasion for us to have recourse to such theories at all. And if it be objected that I have given no additional explanations instead, and but little more than a restatement of known facts concerning the phenomena of cancer, in lieu of the explanations, whose difficulties I have been endeavouring to unfold, I would ask whether we are able to explain any—even the most common—of physical facts, when brought face to face with what appear to be their ultimate manifestations. If we are thus impotent and powerless to explain ordinary physical phenomena, how much more must we be baffled when we attempt to penetrate into the secrets of organic life? We are but too often obliged to content ourselves with a bare enunciation of facts, when we would fain give an explanation, and in dealing with obscure phenomena, whether physical or vital, it seems often better candidly to confess our ignorance rather than have recourse to tottering and untenable doctrines, in our endeavours to explain that which perplexes us. May we not well agree with Herbert Spencer when he says, in that most profound and philosophical work, his “First Principles,” that “ofttimes the mark of the highest knowledge is the confession of ignorance.”

CASTOR-OIL IN THE FORM OF PILLS.—M. Stanislas Martin recommends the following as an easy mode of administering castor-oil. Rub up together 15 parts of oil, 8 of powdered gum acacia, and 15 of water, and then gradually add 15 parts of wheat flour. Mix well together, and divide into boluses or pills, which, left exposed to the air, soon become dry. The purgative action may be increased by substituting an equal quantity of magnesia for the flour.—“Bull. de Thérap.”

OVARIOTOMY IN AUSTRALIA.—Dr. Tracy, Physician to the Lying-in Hospital at Melbourne, has successfully performed ovariectomy. This is the first time the operation has been performed in that country.

Select Formulæ of Prescriptions. Contributed by J. H. SPRAGUE, Esq., M.R.C.S., late Army Surgeon, &c.*

1. Infusum Sennæ Aromaticum (common aperient mixture, or black draught).

R, Sennæ Alexandr. fol. contus, ℥ij.

Coriandr. semin, contus., ʒvi.

Caryophyll. contus., ʒij.

Aquæ destill., f.℥xxx.

Macerate in a closed vessel for four hours, then strain, and add

Magnes. sulphatis exsiccatae, ʒiij.

Extract. glycyrrhizæ rasæ, ʒj.

Dissolve the sulphate of magnesia and liquorice in twenty-four ounces of the infusion, pour off the clear liquid, and add

Tinct. sennæ compos., ʒiv. or ʒvi.

Sodæ bicarbonatis, ʒss.

Spir. ammoniæ arom., ʒss.

Misce; fiat mistura. Dose, ʒj. to ʒij., to which should be added a tablespoonful of warm water.

Remarks.—The infusion of senna made thus is much preferable to that included in the British Pharmacopœia. Cloves have a greater preservative power than ginger, or any other aromatic; and it is stated by Dr. Cullen, in his work on *Materia Medica*, that “coriander best covers the taste and odour of senna, and obviates its inducing constipation.”

2. Mistura Cathartica.

R, Infusi sennæ aromatici, f.℥ix.

Sodæ sulphatis, ʒip.

Magnes. sulphatis exsicc., ʒj.

* This communication has been forwarded to us by a gentleman, formerly a lecturer on *Materia Medica*, who has devoted much attention to the subject of Pharmacology, on which a series of interesting papers from his pen were published so long since as 1823, in the “*London Medical Repository*.” The judicious combination of ingredients, with the view of obtaining a compound agreeable to the eye and palatable to the taste, as well as efficacious in its action, is of great importance in practice, and is a point to which medical men devoted more consideration formerly than at the present day. Mr. Sprague, who is an octogenarian, has, during a long professional career, collected a large number of valuable recipes, from which he proposes to send us occasional selections, with explanatory remarks.—Ed. “*Med. Mirror*.”

Dissolve, and add

Tinct. sennæ compos.

Tinct. jalapæ aa ℥iss.

Misce, fiat mistura, et per chartam cola. Dose, ℥iss. to ℥ij.

Remarks.—This mixture is an excellent combination of purgatives, and generally produces copious evacuations. Dr. Paris observed that “sulphate of soda is rendered more active by combination with other purgative salts, especially with sulphate of magnesia, and the compound is more soluble, and less nauseous.” This is an attempted improvement on the original receipt.

3. Mistura Cathartica Ammoniata.

R, Infusi sennæ aromat., ℥viij.

Sodæ sulphatis, ℥j.

Ammoniæ carbonatis, ℥i.

Solve et adde

Tincturæ sennæ comp. ℥iss.

Fiat mistura, cujus sumat partem quartam secundis, vel tertiis horis donec alvus responderit.

Remarks.—The ammoniated cathartic mixture is one of the most judicious forms of purgatives, as when it is desirable to combine the ammonia with a purging salt, the sulphate of soda should be selected for the purpose, whereby the decomposition of incompatible substances, which often frustrates the intentions of the practitioner, is prevented.

4. Mistura Aperiens Communis.

R, Infusi sennæ, aromatici, f. ℥xxxvi.

Potassæ tartratis, ℥iv.

Tincturæ sennæ comp., ℥ix.

Syrupi sennæ, ℥vi.

Misce, fiat mistura. Dose, ℥iss. to ℥ij.

Remarks.—This is very useful, and a pleasanter formula than black draught, sometimes called “Abernethy’s Port.” It has the advantage of keeping good for a longer time, a sufficient recommendation for keeping it in the dispensary, especially where an extensive practice requires it. This was the usual aperient of the late Dr. Berjew, of Bristol, to whose excellencies as a practitioner I wish to bear my testimony.

5. Mistura Cinchonæ Aperiens.

℞ Confectionis rosæ gallicæ ℥j.

Decocti cinchonæ flavæ ferventis, f. ℥viii.

Stent simul, per horam, et cola.

℞ Infusi hujus colati, ℥viii.

Acidi sulph. diluti, ℥j.

Magnesiæ sulph. exsiccatae, ℥iv. and ℥vj.

Spiritus myristicæ f. ℥ss.

Misce, fiat mistura, cujus sumat partem sextam, bis-terve in die.

Remarks.—Mr. Howship in his Treatise on the Diseases of the Lower Intestines, has described the benefit derived in his practice by cinchona in a similar combination to the above, acting as an effectual aperient in a confined state of the bowels, seeming to depend on torpor of the muscular fibres of the intestines. This medicine will be found to keep the bowels in an open condition in such cases, and while it imparts tone, is comparatively a palatable medicine. Owing to Sir Walter Waller, M.D., having prescribed it for his late Majesty, William the Fourth, during the family residence at Bushy Park, the medicine became of much repute as Sir Walter's celebrated remedy.

6. Mistura Aperiens Aloetica.

℞ Decocti aloes compositi, f. ℥viii.

Tinct aloes, ℥j.

Spiritus ammoniæ aromatici, ℥ij.

Misce, fiat mistura.

Dose, a sixth part, early in the morning, occasionally, when the bowels are confined.

Remarks.—It has been judiciously observed that medicines prescribed for the aged should be of a warm character, to counteract flatulent distention, a symptom so distressing in the decline of life. An aged gentleman, a patient of mine, who was affected with vertigo, and a constant feeling of swimming in the head, indicating a disposition to apoplexy from cerebral congestion, was greatly relieved by persevering in the use of this mixture, and the *affusion* of cold water over the head every morning, the lower extremities being immersed up to the knees in a foot-bath of warm water. The attack seems to have been warded off for years by strict attention to this practice.

7. Mistura Aperiens Infantilis.

℞ Radicis rhœi incisæ, ℥iij.

Fol. sennæ opt. ℥iss.

Caryophylli contusi, ℥ss.

Aquæ destillatæ, f. ℥viij.

Macera in vase clauso, per horas duas, et cola.

In hunc infusum solve

Mannæ opt. ℥j

Deinde adde, liquor. potassæ, f. ℥j.

Tincturæ sennæ comp.

Syrupi ejusdem, ana, f. ℥i.

Misce, fiat mistura.

Dose; for adults, a dessert spoonful, or one, two, or three teaspoonfuls for children, as a pleasant and effective common aperient for children.

N.B. The mixture may be made with cinnamon-water, instead of distilled water, which renders the medicine still more liked.

8. Mistura Gentianæ Compositum (Pharm. Londinensis, 1851).

R Infusi gentianæ compositi, f. ℥xij.

Infusi sennæ aromatici (*Sprague's*), f. ℥vi.

Tincturæ cardamomi compositæ, f. ℥ij. Misce.

Remarks.—In reference to this mixture (which should not have been excluded from the British Pharmacopœia, and which was Abernethy's remedy for diseases of the digestive viscera), my much esteemed friend, the late G. F. Collier, M.D., Lecturer on Pharmaceutical Chemistry and Materia Medica, and afterwards on the Theory and Practice of Medicine, observes in his translation of the London Pharmacopœia, 1836, "Constipation (as I have before noticed under *mistura cinchonæ aperiens*) frequently depends upon atony of the muscular fibre of the bowels, especially in the aged; hence the combination of soda with sulphate of quina, or with any of the simple vegetable bitters, will be useful in similar cases." Dr. C. said, "it may be rendered—must be rendered—more palatable by syrup of orange peel." This is a mere matter of opinion. The late Mr. S. Mackenzie, of London, substituted for Abernethy's mixture the following:—

R Infusi gentianæ comp: f. ℥vij.

Infusi sennæ aromatic. (*Sprague's*), ℥iv.

Potassæ tartarisatæ, ℥i.

Tincturæ cardamomi comp. ℥i.

Misce; fiat mistura.

An eighth to be taken at 11 a.m., and again at 4 p.m., or at bedtime.

9. *Mistura Quinæ Super-sulphatis.*

℞ Quinæ sulphatis, ʒss.
 Acidi sulphurici diluti, ʒi vel. ʒjss.
 Aquæ destillatæ, f. ʒxvi.
 Solve quinæ sulphatem et adde,
 Tincturæ aurantii
 Syrupi rhœados (P. Brit.), ʒii.
 Misce; fiat mistura.

Dose, ʒi., or ʒiss., three or four times a day.

N.B. The sulphate of quina should never be added to *infusum rosæ acidum*, as it deposits an unpleasant pinky sediment by the tannin causing a dirty incompatible deposit, whereas if prepared strictly as above directed, a brilliant red coloured mixture is the result, and a palatable bitter tonic is produced.

10. *Mistura cinchonæ super-muriatis :*

℞ cinchonæ muriatis, gr. ix., or gr. xij.
 Aquæ destillatæ, f. ʒvi.
 Acidi hydrochlorici diluti, ʒj.
 Solve cinchonæ muriat, et adde
 Tincturæ aurantii
 Syrupi rhœados, aa ʒj.
 Misce; fiat mistura. Sumat partem sextam bis terve in die.

Many practitioners prefer the muriate to the sulphate. The price of the former is 3s. 6d. per oz., and of the latter 9s., making a very considerable saving to charitable institutions, when the muriate is employed.

 REVIEWS AND NOTICES OF BOOKS.

1. *Clinical Lectures on Pulmonary Consumption.* By the late THEOPHILUS THOMPSON, M.D., F.R.S.; Edited by his Son, E. SYMES THOMPSON, M.D., M.R.C.P., Assistant-Physician to the Brompton Hospital for Consumption. Pp. 242, 8vo. London, 1863.
2. *Phthisis and the Stethoscope: or, the Physical Signs of Consumption.* By R. P. COTTON, M.D., F.R.C.P., Physician to the Brompton Hospital for Consumption. Third edition, fcap. 8vo., pp. 104. London, 1864.

3. *On the Use of Perchloride of Iron and other Chalybeate Salts in the Treatment of Consumption: with a chapter on Hygiene.* By JAMES JONES, M.D., M.R.C.P., Physician to the Metropolitan Free Hospital, and to the Infirmary for Diseases of the Chest. 8vo., pp. 109. London, 1863.

Is consumption curable? This question, which was answered negatively until a recent period, now admits of a more encouraging solution, and it is no longer a matter of doubt that even in considerably advanced cases of phthisis, some hopes of recovery may be held out to sufferers. Instances of the arrested progress of consumption may not unfrequently be met with when making a *post-mortem* examination of the lungs and chest of persons who have died from some other subsequent disease; and it is probable that more or less distinct traces of tubercular deposit, which has been checked, either naturally or by medicinal means, would be more often found were they more closely looked for. The gloomy prognosis which was formerly given in every case of consumption must have had a most injurious effect in accelerating the progress of the disease, through the depressing nature of so widely spread an opinion.

In proof of the fact that our statements on this point are tenable, we may refer the reader to the opinions advanced in the three books which head this article, all of which hold out hopes of recovery in the earlier, and of palliation in the more advanced, stages of phthisis.

Dr. Cotton's little book deals only with the subject of the signs of phthisis, the treatment being fully described by him elsewhere, viz., in his larger work upon consumption. In the present edition he does not content himself with details only of the physical signs of the affection in its various stages, but adds a chapter specially devoted to a description of those which are indicative of arrest or improvement of the disease. He remarks in the preface that his aim has been to make this work of as simple a character as possible, consisting principally of practical statements, freed from whatever is either complicated or unessential; and, with this object in view, he has produced a valuable aid to the knowledge of the use of the stethoscope.

A great obstacle which presents itself at the commencement of the study of auscultation, consists in the opposite meaning assigned by different authors to the same term, so that the beginner finds himself puzzled about even the simplest phenomena. This difficulty has been still further increased by the vague style employed by writers upon the subject; thus, for instance, Skoda, whose writings upon aus-

cultation have long been accepted as standard authority, has made the singularly loose statement, that "crackling is a *dry* sound, and indicates the presence of *fluid*, probably of a tenacious character, in some of the bronchial tubes, or in a cavity." To obviate this difficulty, Dr. Cotton has introduced a chapter upon the classification and nomenclature of physical signs which, although he shows a decided preference to the employment of French over English terms, is very useful. We must say that, with Dr. Thompson, we prefer English, or Latin, to the French terms generally employed in systematic treatises upon pulmonary affections, while we think the substitution of plain words, such as "rattle," "clicking," "crackling," and "vibrating," for their French equivalents, would assist in simplifying the nomenclature of the physical signs present in chest affections.

Losing sight of the fact that phthisis is as much a general as it is a local disease, too much stress is often laid upon the configuration of the patient, particularly with regard to the shape of the chest. Dr. Cotton points out the fallacy of a mere inspection of the chest in reference to the supposed tendency to the development of phthisis, and states it as his belief, that "the form of the chest has little, if anything, to do with the development of tubercle" (p. 11). He also observes that certain peculiarities of general physical conformation, such as spare and apparently delicate frame, do not bear the close relation to the tubercular diathesis which they are commonly imagined to do. Consumption is more often fatal amongst soldiers, who are picked men, as regards their physical condition, than amongst civilians.

Every writer on chest diseases makes a point of remarking that the apices of the lungs are the chosen seat of tubercles; but, why should the tubercular deposition be more common here than elsewhere in the chest? This appears to be taken for granted, as a plain fact, or else the question has not been thought worthy of discussion. Neither of the three works before us, nor any treatise on medicine to which we at random refer,—Louis on Phthisis, Watson's Lectures, and Aitken's Science and Practice of Medicine,—give any explanation of this predilection of tubercle for the upper part of the lungs. For this peculiarity we believe the following is the reason:—The upper portions of the lungs being held down by the clavicles and adjacent structures, so as to admit of only a relatively small degree of expansion, when compared with the rest of the lungs, are more likely to remain in a quiescent condition of non-expansion when the act of inspiration is inadequately performed, owing to the constrained position of the body in certain trades, or from habitual stooping of the

body. This quiescent state of the air-cells is favorable to the deposition of tubercle, and consequently we find that the apices of the lungs are the most common seat of phthisis. But as every ill has its corresponding good, the fact of the tubercular deposition being thus promoted by insufficient expansion, points to the obvious prophylactic against consumption, viz., full and free expansion of the whole of the lungs with pure fresh air. If the occupation of an individual is of a sedentary nature and requires him to remain during several hours in a cramped position, he should be advised to change the position of the body occasionally, and to expand the chest fully by several deep inspirations; in this manner the tendency to tubercular deposition may be partly averted.

Dr. Cotton states that there is no one particular sign which can be invariably looked upon as the earliest sign of phthisis, although his own observations have led him to the opinion that, in the great majority of cases, a change in the respiratory murmurs is the earliest and surest indication of the affection. The expiratory murmur is prolonged; while the inspiratory sound may be, as compared with that on the opposite side, weak, harsh, jerking, or bronchial. The weak and harsh sounds are those most generally present in the first stage of phthisis, the jerking and bronchial respiration being more usually met with in a more advanced stage of the disease. Next amongst the physical signs are noticed certain changes in the form and movements of the walls of the chest. A slight degree of bulging may be seen over the diseased part, or a comparatively diminished movement in the antero-posterior direction may be evident. At a more advanced period still further changes occur in the shape of the chest; the shoulders become rounded, and the upper part of the spine is inclined forward, so that the front of the chest is contracted, and the patient's height appears lessened.

Alterations are also perceptible in the percussion-sounds, but, as Dr. Cotton observes, it is doubtful whether percussion is so certain an aid to diagnosis as it is commonly supposed to be. Both in auscultation and percussion, one point cannot be too closely enforced, namely, the absolute necessity for a careful comparison between the signs obtained on each side of the chest; indeed, upon this entirely depends the value of percussion, as the healthy percussion-sounds vary greatly in different persons.

Other physical signs observable during the first stage of phthisis are vocal and tussive fremitus, a peculiar vibratory feeling which may be noticed when the hand is lightly placed

over the apex of a tubercular lung, and the patient either speaks or coughs, but Dr. Cotton attaches little importance to this sign; bronchophony and bronchial cough; morbid extension of the heart's sounds; arterial and venous murmurs; dry crackling and other rhonchi; and pleural friction murmur. These signs are of variable value, and it is always desirable to ascertain the presence of several of them before arriving at a decided diagnosis.

As the disease goes on to the second stage, we get an increase of the physical signs which have just been enumerated, while the general symptoms show a considerable advance of the affection. It is of much importance to be able early to detect the commencement of the softening of the tubercle, and this is always to be done by hearing the humid crackling rhonchus, which is extremely characteristic of the altered state of the tubercular deposit. This is a moist, sharp, clear, clicking sound, heard usually one or two, or even three or four, times during inspiration; it generally has its origin in the dry crackling rhonchus of the first stage, which passes on to the humid crackling sound, and always denotes the existence of softened tubercle. Sometimes, instead of this sound, there is present a subcrepitant, or, as some term it, a muco-crepitant rhonchus; or the two sounds may be combined together, ultimately passing into the rhonchus peculiar to the third stage of phthisis.

In this stage the rhonchus becomes more moist, assumes a metallic character, and passes gradually into the cavernous or cavernulous rhonchus, which are modifications of the same sound, and point to the existence of a cavity of variable size. The other chief signs of the third stage are:—amphoric resonance and amphoric breathing; the cracked pipkin sound on percussion (the *bruit de pot fêlé* of Laennec); metallic tinkling; cavernous breathing and cough; pectoriloquy; and amphoric voice and cough. For the production of the cracked pipkin sound, it is necessary that the cavity be large, and tolerably dry, and freely communicating with the bronchial tubes; the best manner of eliciting it is by percussing the chest once or twice immediately over the cavity, the patient's mouth being open, and his head turned in the direction of the auscultator.

Dr. Cotton has done wisely in introducing as a final chapter to his book a description of the physical signs which denote improvement in the condition of the chest of a person suffering from phthisis. These consist, for the most part, in the gradual disappearance of the various morbid phenomena which may have become present. In the first stage of tubercular deposition, for instance, if the respiration, after having

been bronchial, jerking, or harsh, becomes simply feeble, the change is one of a reassuring character. At a more advanced period of the first stage, when the sounds due to secretion have been developed, the diminution of the rhonchus, or still better, its total disappearance, is a valuable mark of the improvement in the patient's condition. In the second stage, at which Dr. Cotton observes that the disease rarely stops, the best favourable signs are the loss of traces of either the humid crackling or the large subcrepitant rhonchus; and although, pathologically speaking, the affection must almost certainly pass on to the third stage, as softening of the tubercular deposit very seldom occurs without the subsequent formation of a cavity in the pulmonary substance, we may conclude that the patient will do well if these signs thus disappear, and at the same time the general health improves, while no more tubercle is deposited. In the third stage, if the chest-walls regain in some degree their original condition, if the percussion-sounds approximate to those of the healthy state, if the cavernous breathing diminishes in extent, becoming less metallic and blowing, and gradually passing into the harsh type, and if the rhonchi due to secretion become less evident, denoting the diminution of the quantity of fluid secreted, and the relative dryness of the cavity, it may be safely considered that the progress of the disease is in course of arrest.

Dr. Thompson's Lectures were originally delivered at the Brompton Hospital for Consumption, in 1851, and those of our readers who perused them upon their first publication will agree with us in the opinion that the thanks of the profession are due to Dr. Symes Thompson, for reproducing a work of such interest. The editor has accomplished his task in a very creditable manner, and the introduction of two new chapters written by himself, together with other fresh matter, greatly add to the practical value of the book.

This is just the book to be read after going through Dr. Cotton's little volume, which treats only of the physical signs of phthisis; for, as the author himself observes in the introduction, while the physical signs associated with pectoral disease are not neglected, they are more cursorily noticed than in many modern works on such affections, as their elucidation is not the primary object of the lectures; other manifestations of disease are more fully discussed, particularly some which have not previously received sufficient attention.

It is a fact not, we believe, generally known, that, although the use of auscultation in the investigation of diseases of the chest is of recent introduction, the suggestion

of such a method of inquiry was really made by an Englishman, Robert Hooke, 200 years ago. This ingenious person, as we gather from Dr. Thompson's interesting account of him, advanced in one of his published works, the opinion that some modes of ascertaining the condition of artificial machinery might be made applicable to the investigation of the mechanism of animal life. Hooke, who was celebrated, amongst other things, for the invention of spring watches, and his improvements in the construction of clocks and philosophical instruments, suggested that, as in a watch might be heard different sounds, showing what is going on in the interior, it might also be possible to discover the internal movements and actions of bodies by the sound conveyed to the ear on attentively listening to them. And, by way of showing the possibility of what was then considered "mad, foolish, and fantastic," he adds that it is easy to hear the beating of a man's heart, and the wheezing of the lung, and that through their increase in number or force, the various sounds may become more evident, so as to denote certain changes in the condition of the parts. Had Hooke been a physician, he might have turned his theories to some practical account; but, as they were allowed to fall to the ground as useless speculations, no actual steps can be said to have been taken to demonstrate the value of auscultation as a means of diagnosis, until Laennec published his views in 1815. The practice of percussion for the purpose of ascertaining the condition of the chest had been previously introduced into notice by Avenbrugger, a German practitioner, in 1763, and had been further improved by Corvisart, the French translator of Avenbrugger's treatise on this subject. In one respect, Laennec committed, according to Dr. Thompson, a great error, for he was so much engrossed with the information derived by the ear, that he neglected that which could be obtained through the medium of the eye, by inspecting the external appearance of the chest.

It is commonly supposed, and the fallacy even extends to medical writings, that hæmoptysis often precedes phthisis, but it will be found, upon examination into the history of a number of cases, that the so-called "spitting of blood" proceeds from the stomach, and is connected with various causes, independent of any chest-affection, while, as is shown by Dr. Thompson, hæmoptysis is by no means a frequent early symptom of phthisis. Out of 24 cases, of which a table is given, other symptoms, such as loss of flesh or strength, or changes of the respiratory sound, preceded the hæmoptysis, in 14; in 6 the spitting of blood commenced about the same time as some other symptom; while in 4 only was there no

evidence of some other pre-existent symptom before the spitting of blood began; even in these four cases it seems highly probable, observes Dr. Thompson, that a careful examination made previously to the occurrence of hæmoptysis, would have detected some change in the respiration.

Again, with respect to hæmoptysis, it is generally supposed by patients and their friends that, when it is considerable, there is great danger of sudden death. This notion is also shown to be not supported by facts, and the author says that such an event is very rare in men, while in women it is of uncommon occurrence. If, therefore, the hæmorrhage from the lungs is not caused by the sudden bursting of a large vessel, before its calibre is almost closed by tubercular deposition, sudden death need not be apprehended. The most frequent cause of hæmoptysis is not rupture of a blood-vessel, but exudation of the blood through the coats of the vessels, in consequence of the free circulation through the pulmonary veins being obstructed by the encroachment upon them by the tubercular deposit, and their consequent gradual obliteration. If this explanation be correct, as we consider Dr. Thompson to be right in assuming it to be, moderate hæmoptysis must be regarded rather as beneficial than alarming, because, by the prevention of the stagnation of unhealthy blood, it must tend to oppose the extension of tubercular disease. This view of the author is upheld by practical observation. In the treatment of hæmoptysis it is more advisable to check the bleeding by producing determination to other organs, than by the indiscriminate use of astringents. A suitable medicine for the purpose of gradually checking the hæmorrhage from the lungs is the sulphate of magnesia, frequently repeated in half-drachm doses, with dilute sulphuric acid. In more urgent cases acetate of lead is one of the best astringents which can be given; gallic acid and turpentine are also valuable remedies.

The third lecture is devoted entirely to a description of expectoration as a means of diagnosis in consumption. According to Dr. Thompson, the principal appearances of the expectoration in the various stages of phthisis may be arranged under four heads, as follows:—1. The salivary, or frothy, expectoration, which occurs from irritation, the result either of pulmonary congestion, or of incipient tubercular deposit. 2. Mucous expectoration, which denotes a more confirmed affection of the bronchial tubes. 3. Flocculent expectoration, when the matter which is coughed up consists of “masses of an opaque white, or dark grey colour, varying in size from that of a lentil to that of a florin, irregularly rounded and chequered at the side, sometimes streaked with

blood, and floating in a viscous transparent fluid." This variety of expectoration is very characteristic of secretion from a cavity. 4. The purulent expectoration which is symptomatic of phthisis much advanced, and, if unmixed with froth, most probably involving both lungs.

The altered condition of the pulse affords some useful information in the diagnosis of consumption, and has, in fact, been known to direct attention to the chest-affection in cases where phthisis was not previously suspected. The pulse becomes frequent, and as the pulmonary disease advances, the number of pulsations becomes proportionately increased. The average number of beats in a healthy adult male is from 70 to 75 in a minute; in an adult female from 75 to 80. In phthisis the pulse mounts up to 90, 100, 110, or even more, beats in a minute, when the disease has reached the second or third stages. Among twenty patients in whom the affection had reached the second stage, only one had a pulse below 90, the number of beats in this case having been 88. In five other cases which had arrived at the second or third stage, the pulse was respectively 112, 104, 116, 112, and 100.

One of the most marked effects of phthisis upon the condition of the blood, is the great diminution of the blood-corpuscles. In health, the average proportion of albumen and corpuscles is 76 parts of albumen, and 130 of corpuscles, in 1,000 parts of blood. In phthisis, the proportion of albumen is increased to 100, while the corpuscles undergo a diminution to 78 parts in 1,000. There are two other diseases in which a striking similarity to this condition of the blood is present,—viz., rheumatism, in which the albumen and corpuscles amount, respectively, to 100 and 74 parts in 1,000; and diabetes, in which the relative proportions are 105 of albumen, and 80 of corpuscles. In these three diseases, and especially in phthisis, we are in the habit of giving cod-liver oil to the patients, with very satisfactory result. To what are these results due? This is a question which does not probably so often suggest itself as would be the case were the administration of the oil less a matter of daily occurrence than it is. Dr. Thompson attributes the beneficial effects to the influence which the remedy exerts upon the proportion of the blood-corpuscles, which become much increased under a continuous course of cod-liver oil, as was shown by the analyses made by the late Dr. Snow and Mr. Rodgers. According to Dr. Hughes Bennett there is, in phthisis, undue acidity of the stomach, which hinders the solution of the albuminous portions of the food, as the alkalinity of the salivary and pancreatic fluids is neutralised, so that their proper functions are not performed. Consequently, local congestions arise, as the lungs have not

sufficient carbon to excrete; "the blood is overcharged with albumen, and the albuminous exudation being deficient in fat, elementary molecules are not formed, so as to constitute nuclei capable of development into cells, and tubercular corpuscles are the natural result."

Dr. Thompson suggests that cod-liver oil tends to check this series of derangement, by its combination with the albuminous element of chyme, so as to produce the healthy chyle-granules upon which the normal state of the blood depends; and he also believes that the administration of *liquor potassæ* enhances the value of the remedy in scrofulous subjects. His reasoning is good, but we have found the *liquor calcis* still more efficacious; besides neutralising the excessive acidity of the stomach, it forms an emulsion with the oil, and in great measure conceals its unpleasant taste, so that in this form it may be readily taken by children and delicate females. If all attempts to keep the oil upon the stomach are unavailing, or if it produces diarrhœa, it may be introduced into the system endermically, by rubbing it into the chest. We have found this plan decidedly useful in some cases, but have experienced difficulty in inducing patients to continue the application, owing to the disagreeable odour; by the addition of a little oil of lavender, as recommended by Dr. Thompson, this objection is removed. He speaks very favourably of the use, for an adult, of a liniment composed of three ounces of cod-liver oil, half a drachm of oil of lavender, an ounce of aromatic spirits of ammonia, and five grains of opium; one-half of this to be rubbed into the chest, night and morning. The two first-named ingredients, used alone, form a valuable liniment; the ammonia and opium may be added if any symptoms are present which indicate the desirability of either counter-irritant or sedative treatment. Other oils, of which the principal are neat's-foot oil (*oleum bubuli*), cocoa-nut oil, or olive oil, may occasionally be substituted for cod-liver oil, but the latter possesses an evident superiority over all other oils which have been tried. The addition of phosphorus to the vegetable oils, when given internally, appears to considerably increase the benefit derived from them, a circumstance which points to the probable fact that the effects of cod-liver oil are partly due to the small, but constantly present, proportion of phosphorus which it contains. Various fish oils have been employed instead of cod-liver oil, but their strong odour and unpalatable flavour have prevented them from being extensively used.

We may here refer briefly to ozonised cod-liver oil, first introduced into notice by Dr. T. Thompson, in a paper read before the Medico-Chirurgical Society in 1859, and subse-

quently experimented upon by Dr. Symes Thompson, who gives the results of a series of interesting observations made at King's College Hospital. The peculiar action of ozone is a remarkable influence on the pulse, which it lowers in many instances, ten, twenty, or even more beats in a minute, at the same time strengthening the system. The influence of ozone appears to be specially marked in phthisis, in consequence of the great avidity which the blood has for oxygen.

It is often erroneously supposed that the oedema of the legs frequently observed in phthisis, is dependent upon Bright's disease, but this is by no means a correct assumption. On the contrary, Dr. Thompson shows that it is usually a sign of debility, and of an impoverished state of the blood, and that it rarely arises from Bright's disease, which observations conducted at Guy's Hospital and at the Brompton Hospital have proved to be a less frequent concomitant of phthisis than of other affections. In a series of investigations made at the former institution by Dr. Rees (*vide* Guy's Hospital Reports, vol. vi.), regarding the relative frequency of the occurrence of albuminous urine in a number of cases of disease, taken miscellaneously, it was found that no less than 17 per cent. of the patients had albuminous urine; on another occasion, special care being had in conducting the examination of the urine, the nitric acid test being employed as well as heat, the proportion reached 9 per cent. of the total number of cases. Dr. Thompson found that albuminous urine was present in only about 2 per cent. of the phthisical patients under his care at the Brompton Hospital. When albuminuria does actually occur in any consumptive patient, there is a great probability of death occurring from oedema of the lungs, before the tubercular disease has made any considerable progress. Another point to be learned from the examination of the urine on consumptive persons is that there is an excess of uric acid in that secretion. The author gives as the reason for this, that there is a deficiency of oxygen in the blood, and that consequently there is a tendency to the formation of uric acid rather than of urea and carbonic acid.

Amongst the early signs of phthisis, Dr. Thompson lays great stress upon prolonged, harsh expiration, and the interrupted, jerking, or wavy respiration. His remarks concerning these signs are very interesting, but we must pass them over, as they have already been spoken of in connection with Dr. Cotton's book. The condition of the blood in early phthisis is a subject to which Dr. Thompson paid great attention. Being desirous of ascertaining whether any difference could be detected between the blood of consumptive and of

healthy persons, he conducted some microscopical examinations, the results of which showed that when consumptive blood is examined by the aid of the microscope, instead of the blood-corpuscles assuming a distinct form, they soon lose their characteristic shape, and appear to melt into a confused mass, as occurs also in the blood of the spleen, and in persons who have undergone a severe course of mercury. In such cases it is probable, he observes, that the disease will proceed rapidly; and although his observations with respect to the state of the blood are not of themselves conclusive, they may lead the way to some useful inquiries.

An early indication of phthisis is diminished capacity of the lungs for air, as evidenced by the spirometer. This decreases to a remarkable extent in phthisis, the average reduction in the first stage, amongst several hundred patients examined at the Brompton Hospital, amounting to more than 30 per cent., and in the second stage to more than 50 per cent. We sometimes hear the phrase used in ordinary conversation, that "So-and-so has only one lung left (or half a lung);" this mode of expression is not so hyperbolic as it at first sound appears, if we consider it as referring to the relative quantity of lung tissue which remains fit for respiration. In using the spirometer as an aid to diagnosis, it must be borne in mind that, through timidity or inexperience, some persons do not expire so much air as they could, if breathing to the full extent, so that it is desirable not to rely too much upon the apparatus in forming an unfavourable diagnosis; but, on the other hand, if a person expires his average quantity, it is, according to Dr. Hutchinson, who invented the spirometer, fair to assume that he does not suffer from tubercular disease of the lungs.

In consumptive patients, there frequently exists a bright red mark at the reflected edge of the gums, usually of a deeper colour than the adjacent surface, and sometimes only a slight streak, at others constituting a well-defined margin. This gingival margin, generally most distinct around the incisor teeth, is so commonly present, that Dr. Thompson considers it as one of the signs of the phthisical diathesis which ought to be looked for in making a diagnosis. In a case of phthisis its absence may be considered as a favourable sign. Dr. Thompson accounts for the gingival margin by the suggestion that it is probably owing to the undue avidity of phthisical blood for oxygen. When it is well defined, it is not unusual to find also hypertrophy of the border of the gum, somewhat analogous to the state of the skin around the nails, in the clubbing of the fingers, which is frequently observed in consumptive patients.

The causes of consumption are fully described under the heads of hereditary tendency (a very frequent source of phthisis, occurring in perhaps one-fourth of the whole number of deaths from consumption), bad air, dissipation, mental depression (a very powerful predisposing cause of phthisis), the effects of climate, and the want of muscular exercise. Strong evidence of the effects of depressing mental emotion in producing tubercular disease is afforded by the statistics of illness in prisons. Dr. Baly, quoted by Dr. Thompson, collected particulars of the health of prisoners in various parts of this country and in America, and one conclusion at which he arrived was that, under every variety of climate, diet, and general management, consumption was more common in prisons than amongst the ordinary population. At Millbank prison he ascertained that the mortality from consumption was four times the ordinary average. Although the deaths throughout England from phthisis include more women than men, the average of deaths from this disease in London and some other large towns is greater in the male than in the female sex. Dr. Thompson accounts for this peculiar circumstance by the supposition that mental anxiety, arising from the constant struggle for subsistence which goes on in all large towns, and in which men take the principal share, plays a great part in producing this difference in the average of the mortality from phthisis.

The title of Dr. Jones's book conveys only a very inadequate idea of its value, for, apart from the valuable observations which he has made respecting the therapeutic power of iron, he has given, within moderate compass, a variety of information upon consumption; so that the book will be read with instruction and profit by every one who is interested (and who is not?) in a disease which carries off at least one-sixth of the whole population.

Dr. Jones advances the theory that the so-called "wasting" of structure in phthisis is the result, not of the excessive activity of oxygenation, as usually taught, but, on the contrary, of its deficiency; and, in support of the view that a deficient supply of oxygen is a check to nutrition, he calls attention to the fact that the constituents of animal structures include more oxygen than the albumen or fibrin of the blood from which they are formed.

As this insufficient supply of oxygen is produced by the diminution in the number of the blood-corpuscles, which we have already alluded to in our notice of Dr. Thompson's lectures, we must seek for some remedial agent which has the power of promoting the formation of blood-corpuscles. Cod-liver oil possesses this power, also exercised to perhaps a

still greater extent by iron, to which a prominent position ought consequently to be given in the treatment of consumption.

A great mistake, which has often been committed in the administration of the preparations of iron to phthisical patients consists in giving it in too large doses, under the erroneous impression that if moderate doses are so efficacious, larger ones must be still more so. Dr. Jones specially points out the fallacy of this method of treatment, and shows clearly that the administration of iron in phthisis should be limited to the quantity necessary for the process of sanguification, and that any excess over that quantity is not only useless but injurious. One great reason for not pushing the doses of the ferruginous preparations too far is, that owing to the great frequency of irritable dyspepsia in consumptive patients, large doses would cause nausea, loss of appetite, and headache.

The preparation of iron to which Dr. Jones gives the preference, is the neutral perchloride, on account of its chemical constitution and properties, and the favourable result of the large series of experimental observations which he has conducted, in order to test the value of this salt. He was the first to prescribe it internally; its previous use having been confined to its external application as a styptic. Its introduction into the British Pharmacopœia, in the form of *tinctura ferri perchloridi*, which replaces the old *tinctura ferri sesquichloridi*, furnishes a convenient mode of administration of this remedy.*

The first four chapters of the work contain a description of the tubercular diathesis, the causes of imperfect, or mal-, nutrition, and the pathology of phthisis. The author next proceeds to discuss the value of iron as a remedy in consumption, giving tables of the results of its use in 300 cases. In 200 cases, treated by perchloride of iron and cod-liver oil, the health became much improved in 120, and improved in 50, while no improvement was observed in 30 cases. A second table, of 100 cases treated by perchloride of iron alone, gives 62 cases in which the health was much improved, 32 in which it was improved, and 6 in which no improvement was obtained. These statistics are in favour of the treatment by perchloride of iron over the treatment by this salt and cod-liver oil combined. The author also states, that of the 300 patients treated by perchloride of iron, with or without cod-liver oil, 143 gained in weight.

* Dr. Jones does not, of course, lay claim to the introduction of a new remedy, as iron has long been a favourite medicine in the treatment of phthisis; but his real object is to show the best manner of administering it, its proper use, and the causes of its occasional failure.

A long chapter is devoted to the consideration of the symptoms of consumption, as indicating the use of iron. So far is the perchloride of iron from producing dyspepsia, when it is properly administered, that we find it mentioned that in 215 out of 292 cases of phthisis, the appetite became improved under the administration of this preparation of iron. The perchloride appears to be equally valuable in controlling night perspirations; for, out of 232 cases in which these occurred, 149 were much relieved, in 49 no return of the night-sweats occurred, and in 34 only did the remedy seem to possess no influence in controlling these troublesome symptoms.

Our space will, unfortunately, not permit of our making further abstracts from this work, which concludes with a very sensibly-written chapter on the hygienic management of consumption, but we hope that our readers will compensate for any deficiency in this respect by perusing it themselves.

On Combined External and Internal Version. By J. BRAXTON HICKS, M.D., F.R.S., Lecturer on Midwifery and Diseases of Women, and Assistant-Physician, at Guy's Hospital. Pp. 72, 8vo. London: Longman and Co. 1864.

ALTHOUGH Wigand, in an essay, published in 1807, pointed out that pressure through the abdominal and uterine walls could effect a definite revolution of the foetus, so that the child could be turned from the transverse positions and its modifications by external manipulation alone, his views have received very little attention, excepting from some other German practitioners, and until the appearance of Dr. Hicks' present work, the question of external version has met with scarcely any notice amongst British obstetricians.

Dr. Hicks brought the subject forward in one of the medical journals in 1860, and more recently in 1863, before the Obstetrical Society. He now describes the method at greater length, and adduces fresh cases in illustration of his views.

Until the introduction of the vectis in the sixteenth, and of the forceps in the early part of the seventeenth century, the only mode of delivering a live child, when the presentation was vertical, and the natural powers of expulsion failed, was by the operation of turning, the alternative resorted to in the event of failure being the breaking up of the head of the foetus. As this latter practice was repugnant to the feelings of those concerned it was always avoided when possible, and, as a consequence, turning was more frequently performed

than it has since been. The author shows, from his own researches, and those of Dr. Simpson and others, that the results of this practice must have been very satisfactory where there was not too great a discordance between the dimensions of the foetal head and the maternal passages, and where the head had not descended too far into the cavity of the pelvis to allow of the operation.

The introduction of these instruments, the vectis and forceps, into use, entirely modified the system of practice in midwifery. So much, indeed, were the advantages of version overlooked, that in the next generation the rota observed in cases of obstructed labour was, according to Dr. Hicks, the vectis, the forceps, and if these failed, the perforator, no attempts being made at delivery by turning.

Wigand, having noticed that in the majority of so-called transverse presentations, the child lays obliquely, so that either the head or the breech is nearer to the os uteri, devised a plan of external manipulation by which the part situated nearest to the os was made to present, and as the head was most frequently nearest to the os, he generally employed cephalic version. He only used the hand within the uterus to guide the presenting part into the os, and depended, in fact, upon outer manipulation alone. He was thus able only to rectify abnormal presentations, without being able to accomplish turning in any direction, whether podalic or cephalic, partial or complete. Dr. Hicks has improved upon Wigand's method, by adopting simultaneous external and internal manipulation, so that by this plan version in any direction may be accomplished. The combined method of turning, for a full account of which we must refer the reader to the work itself, as it cannot be clearly described without illustrations, such as are to be found in Dr. Hicks' book, has been advantageously employed by that author in cases of malpresentations, convulsions, small pelvis or other deformity, extreme depression, and placenta prævia.

Dr. Hicks sums up the advantages of the combined mode of version under twelve heads, seven of which are of avoidance, and five of acquisition. By it he says we may avoid:

1. The addition of the hand and perhaps of the arm to the uterine contents, so that much irritation is prevented.
2. The entry of air into the uterus.
3. Liability to ruptured uterus.
4. Much of the pain caused by the usual plan of turning.
5. The necessity of the operator's baring the arm, and removing the coat, by which the patient is often much alarmed.
6. Much of the fatigue felt by the operator during the contractions of the uterus; and,
7. the increase of collapse by the presence of the hand in cases of great ex-

haustion. The advantages of acquisition are stated to be: 1. The power of correcting malpresentations as soon as they are detected. 2. The capability of early delivery. 3. The opportunity of making the child serve the purpose of a compress in placenta prævia. 4. The capability of turning when the old method is impracticable; and, 5, the power of producing cephalic version more readily than by the plan of turning formerly employed.

While stating the advantages of this method, the author does not ignore the circumstance that it has certain difficulties attending it, which, however, can be overcome by the means which he points out. These difficulties are: The doubling of the foetus upon itself, as occurs in protracted transverse presentations; the firm and active contraction of the uterus upon the foetus; the action of the abdominal muscles; exceeding flexibility of the child; excess of liquor amnii; and extreme fatness of the abdominal parietes.

If the practitioner fails to succeed in turning by combined external and internal manipulation, he can readily have recourse to the old plan, which, instead of being rendered more difficult, is really made more easy.

Observations on Defects of Sight in Brain Disease; Ophthalmoscopic Examination during Sleep. By J. HUGHLINGS JACKSON, M.D. London: 1863. (Pamphlet.)

DR. HUGHLINGS JACKSON begins his observations by stating that he writes as a physician, and not as an ophthalmologist. He then relates cases to show the value of a knowledge of the varieties of amaurosis and of disorders of vision generally in the study of diseases of the nervous system. He relates, as one contribution to the pathology of the cerebral circulation during convulsion, an examination of the retina in a case of pseudo-epilepsy. The optic disc was quite bloodless. He dwells, however, chiefly on amaurosis from organic disease, as from tumours of the brain, and chiefly of the cerebellum, and alludes to the curious fact that amaurosis not unfrequently attends paraplegia.

With the same general purpose, he relates in the second paper examinations of the retina during sleep. His object is, he states, to promote the study of the circulation in the eye during healthy sleep, as a starting point for investigating the allied pathological conditions of stupor and coma. Dr. Jackson particularly draws attention to the fact that although the retinal arteries were somewhat smaller during sleep than after waking, the difference was not great.

HOSPITALS IN THE METROPOLIS AT WHICH SPECIAL MEDICAL INSTRUCTION CAN BE OBTAINED.

Besides the hospitals named in our last number, to which medical schools are attached, numerous institutions exist at which instruction can be obtained. Amongst these are the following, respecting which information has reached us.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.—*Con. Phys.*, Drs. C. J. B. Williams, and W. H. Walshe.—*Phys.*, Drs. Roe, Cotton, Quain, Alison, and J. E. Pollock.—*Asst. Phys.*, Drs. E. Smith, W. H. Stone, and E. S. Thompson. Pupils are admitted to the hospital practice. Fees: for three months, 3*l.* 3*s.*; for six months, 5*l.* 5*s.*; perpetual, 10*l.* 10*s.* Number of beds, 210. Clinical instruction is given daily by the physicians and assistant-physicians. Clinical assistants reside in the hospital. Pupils are eligible for these appointments, which are held for six months.

HOSPITAL SHIP, "DREADNOUGHT," off Greenwich.—This institution contains 200 beds, and is established for the relief of seamen of all nations. Casualties from the shore are also received. Residence is provided on board for students and others who may be desirous of studying diseases incidental to tropical climates before entering the service, or going abroad. Constant opportunities also occur for the performance of surgical operations. *Phys.*, Dr. Barnes, and Dr. Stephen Ward.—*Surgs.*, Messrs. Busk, F.R.S., and H. T. L. Rooke.—*Asst.-Surg.*, Mr. R. J. Bedford.—*Resident Med. Off.*, Mr. H. Leach. Fees: for resident dressers, 10*l.* 10*s.* a month, which comprises mess expenses. For non-residents, 5*l.* 5*s.* There are great facilities for operations on the dead subject.

NATIONAL HOSPITAL FOR THE PARALYSED AND THE EPILEPTIC, 24, Queen-square, Bloomsbury.—This hospital contains 30 beds. More than 1,000 out-patients are now under treatment. The physicians attend every Monday, Tuesday, Wednesday, and Friday. Medical practitioners and students will be admitted on showing their cards. *Phys.*, Drs. Ramskill and Radcliffe.—*Asst. Phys.*, Dr. Hughlings Jackson.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street.—The medical officers attend daily at 9 a.m. Fee for three months' attendance, 3*l.* 3*s.*; perpetual, 5*l.* 5*s.* Lectures on the Diseases of Children are given weekly during the winter by the physicians and surgeons. Admission free to students after their first year, on previous written application to the Secretary at the hospital. *Phys.*, Drs. West and Hillier.—

Asst. Phys., Drs. Harris, Dickinson, Buchanan, and Ingram.
—*Surg.*, Mr. T. Holmes.—*Asst. Surg.*, Mr. Thomas Smith.

ST. LUKE'S HOSPITAL FOR LUNATICS, Old-street.—*Phys.*, Drs. Monro and Wood.—*Resident Medical Superintendent*, James Ellis, Esq. (of whom all particulars can be obtained respecting the lectures). Sessions of three months each commence on October 1st, January 1st, May 1st. Fee for the session, 3*l.* 3*s.*

METROPOLITAN FREE HOSPITAL, Devonshire-square, City. Instituted in 1836.—Number of beds, 30. Attendance of out-patients in 1863, 86,803. *Phys.*, Drs. Stavely King, James Jones, and Abbotts Smith.—*Asst. Phys.*, Drs. Palfrey, H. G. Sutton, and E. Head.—*Surgs.*, Messrs. Chance, Childs, and Hutchinson.—*Dent.*, Mr. A. Coleman.—*Res. Med. Off.*, Mr. N. Heckford (of whom information respecting pupils can be obtained). This hospital is recognized by the Apothecaries' Company for part of the medical attendance required of candidates for the licence.

ROYAL ORTHOPÆDIC HOSPITAL, 315, Oxford-street.—Operations, Thursdays, 2 P.M. Lectures are regularly given to medical practitioners and students. Number of beds, 40. *Surgs.*, Messrs. Tamplin and W. Adams.—*Asst. Surg.*, Mr. Brodhurst.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone-road. Instituted, 1752.—The hospital contains 50 beds. Pupils are admitted to reside and board in the hospital (after having been examined by the physicians) for three months, on payment of 30 guineas. *Phys.*, Drs. B. Brown and F. W. Mackenzie.—*Med. Off. for Out-Patients*, Mr. J. Cholmondeley and Dr. Brodie.

DENTAL HOSPITAL OF LONDON, 32, Soho-square.—*Lectures: Mechanical Dentistry*, Mr. Hepburn.—*Dental Metallurgy*, Mr. Makins.—*Dental Surgery*, Mr. Cartwright.—*Dental Anatomy*, Mr. Ibbetson. General Fee for the Special Lectures required by the Curriculum, 15 guineas.—*Dent. Surgs.*, Messrs. Ibbetson, Underwood, Tomes, S. Cartwright, C. Rogers, and Hepburn.—*Asst. Dent. Surgs.*, Messrs. J. Walker, Hayward, Forsyth, Coleman, Gregson, and A. Hill. Fee for two years' hospital practice, 15 guineas.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, Charing-Cross.—The hospital contains 32 beds. Fee for attendance on the practice and lectures: three months, 3*l.* 3*s.*; perpetual, 5*l.* 5*s.* The office of house-surgeon is open to the competition of the students attending the hospital.—*Surgs.*, Messrs. Hancock and H. Power.—*Asst-Surgs.*, Messrs. J. Hogg, and Rouse.

ROYAL INFIRMARY FOR WOMEN AND CHILDREN, Waterloo

Bridge-road. Number of beds 16.—*Phys.*, Drs. Wilks, Fagge, and J. B. Hicks.—*Surg.*, Mr. J. C. Forster.—*Dent.*, Mr. Allingham. Advanced students and practitioners are allowed to attend the practice of this institution gratis. If a certificate of attendance is required, a fee of five guineas is charged.

THE MONTH.

PROSECUTIONS UNDER THE MEDICAL ACT.

Several cases arising out of infringement of this Act, have lately been tried in the Metropolitan Police Courts. One case was that of a Mr. Bearnard, of No. 59, Regent-street, who was charged with styling himself “Surgeon-Chiropodist,” thereby implying that he was duly qualified to practise as a surgeon. Mr. Tyrwhit, of the Marlborough-street Police Court, before whom the case was brought, after hearing the evidence, adjourned it for a week, in order that he might consider it before giving a decision. Upon the second hearing of the case, Mr. Tyrwhit gave the following decision:—

“I have considered this case, and it appears to me that ‘surgeon,’ though prefixed to ‘chiropodist,’ cannot be treated as mere surplusage, but must have a meaning, and was intended to have one. That meaning must be measured, not by the narrow sense in which knowing Londoners, experienced in vain pretensions and in the steps of medical rank, might take it, but by the general acceptation which the great body of mankind passing the defendant’s door-plate would ascribe to the words used thereon. I think, on the whole, that these words would convey to them that a surgeon, duly qualified and registered as such, practised at the house in question as a chiropodist. Taken to be such a surgeon, he would command more confidence with those who sought his aid as a chiropodist, and not only that, but he might naturally be consulted by them in surgical matters beyond the mere treatment of corns. We must allow something for that craving after small titles, which is so widely spread at present, brought, it may be, by German steamers. The corn-cutter is restless till he writes himself chiropodist, and next, from fear of so much Greek not being understood, dubs himself surgeon at all hazards. On the whole, if the defendant will remove from his door-plate and cards the word ‘surgeon,’ I might consider as to mitigating the penalty, which is 20*l.*, and in that hope would adjourn my decision for a week; but if he now request me to grant a case for the opinion of a superior court, I will do so. In that event, it will be needless to adjourn the case, and I fine him 20*l.*”

The defendant, through his solicitor, elected to take a case for a superior court, and was required to enter into his own recognizance, and that of a surety for 50*l.*, to appear. Great credit is due to Mr. Talley, the solicitor, who ably conducted the prosecution in this case.

It is to be regretted that such sensible views as those of

Mr. Tyrwhit, are not entertained by all of his brother magistrates. A chemist, living in East Smithfield, was charged at the instance of a medical gentleman, resident in that neighbourhood, with falsely pretending, both by advertisements and bills, which were circulated extensively in the district, to the title of Surgeon, and thereby leading persons to suppose that he was properly registered under the Medical Act. The sitting magistrate thought that there was a difficulty in convicting, and felt disposed to dismiss the case. Mr. Butler Rigby, the barrister who appeared for the prosecution, requested an adjournment for a further hearing, which was granted. Much has been said about the vagueness of the Medical Act, but these two conflicting opinions apparently point to another source of difficulty in procuring the punishment of offenders under the Act. Taking a common sense view of the question, as Mr. Tyrwhit has done, nothing could be plainer than that a person who assumes a title which misleads others into the idea that he is a qualified medical practitioner, offends against the Act in doing so. If any one falsely assumes to be a lawyer, he is promptly punished, and the same degree of justice ought to be dealt out where any one endangers the lives of Her Majesty's subjects, and defrauds them of their money, by pretending to be a medical practitioner. The numerous articles on the subject of pretended medical titles which have lately appeared in the newspapers, show that the mind of the public is gradually becoming sensible of the injury which it has so long allowed to be inflicted upon itself by impudent and ignorant pretenders. If a Medical Protection Society were now formed, and some dozen prosecutions under the Medical Act were vigorously instituted, a severe blow would be dealt to the disgraceful and filthy system of quackery which has so long been allowed to exist. [Since this article has been put in type, the adjourned hearing, September 29th, of the East Smithfield case has taken place; and, we are pleased to be able to add that the magistrate, Mr. Paget, having heard fresh evidence, decided that the defendant had been guilty of an offence under the Act.]

MEDICAL INTELLIGENCE.

THE GOVERNMENT COMMISSION ON THE NATURE AND TREATMENT OF SYPHILITIC DISEASE.—The Commission which Lord Clarence Paget announced it to be the intention of the Government to appoint to inquire into the nature and treatment of syphilitic disease, is likely to commence its inquiry at no distant period. Mr. Skey is appointed the President of the

Commission, which will specially inquire into the causes of the extreme prevalence of the disease amongst the common soldiers and sailors.

MEDICAL PHOTOGRAPHIC PORTRAIT GALLERY.—Mr. Fitt, of Regent-street, has recently brought out a number of very excellent photographic portraits of eminent members of the medical profession. These include most of the members of the General Medical Council, whose portraits this artist was specially permitted to take during the recent session, at the College of Physicians. We also observed in Mr. Fitt's collection, which he obligingly shows to any medical man, remarkably well-executed portraits of Dr. Babington, Sir Ranald Martin, Dr. Rees, Professor Miller, Dr. Pitman, Messrs. Skey, Luke, Arnott, and many other professional celebrities.

A NEW CONVALESCENT HOSPITAL.—Mr. Banting, whose name has been associated with the treatment of obesity, has issued an appeal to the public for the erection of an hospital to be named the "Middlesex County Hospital." Mr. Banting heads the list with the liberal donation of £500.

THE CHAIR OF SURGERY AT EDINBURGH.—Mr. Spence is to be Professor Miller's successor in this chair. He is well known as having made a high reputation as a teacher of Surgery in the Extra Mural School, and as one of the most successful operators and best practical surgeons of the day.

MEDICAL BENEVOLENT SOCIETY, BIRMINGHAM.—Appointments made at the annual meeting on Friday, August 26, 1864:—Mr. O. Pemberton, *President*; Dr Fayrer, of Henley-in-Arden, and Dr. Burbury, *Vice-Presidents*; Mr. Archer, *Director*, in place of Mr. T. Freer, resigned.

THE NEW INDIAN MEDICAL WARRANT.—The new Medical Warrant sent out by Sir Charles Wood has given great dissatisfaction throughout the service. It benefits all, except Surgeon-Majors of 20 years' standing, in this way—it makes their small pay smaller. It cuts down what was too little for the purposes of life before. The Indian Medical Service has been a very fine one: it will never reach the same standard again till it is fairly treated, and it may be well for Sir Charles Wood to look that fact fairly in the face.—*Calcutta Correspondent of the Times*.

ST. THOMAS'S HOSPITAL.—Mr. Francis Hicks has been unanimously elected to the office of Treasurer of this hospital.

THE REPORT OF THE HOUSE OF COMMONS COMMITTEE ON THE UTILISATION OF SEWAGE.—This Report fully bears out the necessity and possibility of using the sewage of towns for the purpose of manure. There is now some hope that the

filthy floods carried down to Barking Creek and Erith by the Metropolitan tunnels may be stopped short of the Thames.

DOUBLE AMAUROSIS WITH HEMIPLEGIA.—In a recent number of the *Medical Times*, Dr. Hughlings Jackson states that when, with double amaurosis, there is hemiplegia or unilateral convulsions, the left is the side usually affected, so far as his experience goes. But, as he has seen but ten cases, he asks for more facts, and would be glad of information on this point from those who have cases of hemiplegia with double amaurosis under their care.

QUEEN'S COLLEGE, BIRMINGHAM.—At a recent meeting of the Professors of the College the following recommendations of gentlemen to vacant chairs were made to the Principal and Council:—Mr. Lloyd to the chair of Practical Anatomy, vacant by the appointment of Dr. Foster to the chair of Descriptive Anatomy; Dr. Norris to the chair of Physiology, vacant by the appointment of Professor Lawson to the chair of Physiology at St. Mary's Hospital. The Professors also recommend that the chair of Medicine and the office of Physician to the Queen's Hospital, both of which are now vacant, should be combined.

KENT MEDICAL BENEVOLENT SOCIETY.—This society has just published its seventy-seventh annual report, which indicates continued growth and success. The income of the past year was 544*l.*, out of which 350*l.* was voted to eight annuitants, leaving, after payment of incidental expenses, a considerable sum to be added to the already large amount of 800*l.*, invested in three trustees. The number of members is 180, who contribute 1*l.* 1*s.* annually.

THE NEW HÔTEL DIEU AT PARIS is to be built to the north of Notre Dame. It will contain about 800 beds; each ward containing about 36 beds.

TRICHINOSIS IN NEW YORK.—Dr. Krombein reports that this disease has been met with in the western part of the State of New York. On examining portions of the muscles of some patients who died of what seemed to be an anomalous form of rheumatic fever, he found in them numerous trichinæ. In cases occurring to other practitioners, the trichinæ were also found, as well as in the sausages which had been eaten. In the muscles the parasites were free; in the sausage, encysted.—*American Journ. Med. Science*, July.

VALUE OF LIFE IN INDIA.—From the rate of mortality a life table has been constructed, from which the mean duration of life, as well as the value of the annuities dependent on soldiers' lives in India, can be deduced. By this table it will be seen that the mean after-lifetime, or expectation of life, as it is sometimes termed, at the age of 20 in India is 17·7 years,

while it is 39·5 years in England ; so that life is shortened by more than 21 years by residence in the former country. The after-lifetime at the age of 40 is 15 years in accordance with the Indian, 26 in accordance with the English table.

SUCCESSFUL LIGATURE OF THE INNOMINATA.—The innominate and right carotid were tied at one operation for the relief of aneurism, by Dr. A. W. Smith, of New Orleans, last May. The patient was a mulatto, aged 33. Three weeks after the operation, and one week after the separation of the ligatures, some pultaceous hæmorrhage recurred again and again, whereupon Dr. Smith tied the vertebral with complete success. The patient was well and walking about on August 16. The ligature of the vertebral is due to the suggestion of Dr. D. L. Rogers.

THE YELLOW FEVER OF BERMUDA.—Advices from Bermuda to the 29th of August, received by the "Darien," report that yellow fever was on the increase. The captain and most of the crew of the merchant steamer "Powerful" had died.

ROYAL COLLEGE OF SURGEONS.—The registration of students commences on October 3rd, when it will be necessary to produce, in addition to their hospital cards, a certificate of having passed a preliminary examination, or the grounds of their exemption, or their hospital studies will not be registered or in any way recognised. The preliminary examination for the Fellowship—*i.e.*, in Classics, Mathematics, and French—will commence on Monday, the 17th instant, and the professional examination on the 22nd of next month. The primary examination in Anatomy and Physiology will commence on the 6th of November.

NEW MINERAL SPRING AT WHEAL CLIFFORD, NEAR RED-RUTH, CORNWALL.—This spring yields 250 gallons per minute ; has a temperature of 122° F. at a depth of 1,350 feet, and proceeds from a fissure six to twelve feet wide of elvan and porphyritic granite, and of killas or clay-slate. The gases emitted are carbonic acid, oxygen, and nitrogen. Professor Miller says that solid matter is so great as to exceed by more than four times the proportion of that yielded by the Bath waters. Its composition, too, differs: it contains little sulphate of lime, and is almost free from magnesia. It is, however, rich in chlorides of calcium and sodium, and contains one of the new metals, cæsium, which has been for the first time detected in our mineral waters. Lithium is, however, its characteristic feature, which constitutes the twenty-sixth part of the solid contents.—*Sir Charles Lyell's British Association Address*, Bath, September, 1864.

HEALTH OF THE BRITISH AND FRENCH ARMIES.—From an

official return just published it appears that the cases of sickness in the French army have been two and a half times as numerous as in the British; but that the number constantly non-effective from sickness, and the sick time to each soldier, have been nearly identical in the two services.

BIRMINGHAM GENERAL HOSPITAL.—The Chairman of the Birmingham Musical Festival Committee has handed over to the weekly board of the hospital the sum of £3,000, being the first instalment of the proceeds of the musical festival recently held in aid of the funds of the hospital.

GIFT OF A DISPENSARY.—Mr. Staniforth Beckett, of the Knoll, Torquay, Devon, formerly of Barnsley, has just presented a handsome building and £5,000 for its maintenance as a dispensary, to the inhabitants of Barnsley. The late Mr. Alderson has also bequeathed £100 to aid in the good work commenced by Mr. Beckett.

PARAGUAY ARMY.—Dr. Stewart, an Edinburgh University graduate, has been made surgeon-general to the Paraguay army under President Lopez. He has several Englishmen already under him, and has lately been instructed to procure the services of three more English surgeons. The following gentlemen have consequently gone out, on the nomination of Professor Laycock:—James Rhind, M.D., James Wilson, M.D., and William M. Banks, M.D.

LEEDS GENERAL INFIRMARY.—Some of the friends of the late Dr. Hardwick, being desirous of showing respect to his memory, have subscribed nearly 300*l.* towards founding a prize, to be called the “Hardwick Clinical Prize,” to be awarded annually to the best student in Clinical Medicine at the Leeds General Infirmary.

COLLEGE OF SURGEONS’ PRIZES.—The Council of the College of Surgeons offer three Jacksonian prizes of twenty guineas each for competition during the present year, besides their Collegial prize of fifty guineas, and two Jacksonian prizes in the ensuing year.

THE MEDICAL OFFICER OF HEALTH FOR MARYLEBONE.—At the meeting of the Marylebone Vestry on September 22, Mr. Churchwarden Baddeley in the chair, Dr. Bachhoffner moved a resolution, expressing the regret of the Board at the death of Dr. Dundas Thompson, which, being seconded by Professor Marks, was carried unanimously. Mr. Tavener then moved a resolution with reference to the appointment of a successor to Dr. Thompson. After expressing his strong disapprobation of the course which had been adopted by vestrymen, in signing a document pledging themselves to vote for a particular candidate, he said he hoped that, nevertheless, they would act like men of business, and not prejudge

the question. He moved the appointment of a committee to consider and define the duties of Medical Officers, and agree upon an annual stipend for such office, and to report thereon that day fortnight. Mr. Herring seconded the motion, which, after some discussion, was carried.

Dr. Whitmore has resigned his seat at the vestry, and will come forward as a candidate. Several other candidates are already spoken of.

PASS-LISTS.

APOTHECARIES' HALL.—The under-named gentlemen passed their examination, and received certificates to practise, on the following dates. September 1st :—Bramhall, Sykes, Clifton ; Britton, William Samuel, Acacia-road, St. John's Wood ; Grellet, Charles John, Lloyd-street, Lloyd square ; Hickenbotham, James, Birmingham ; Hughes, David, Charing-cross Hospital ; Pownes, Benjamin Lamb, Billingborough, Lincolnshire ; Thursfield, Thomas Greville, Broseley, Salop ; Vise, William Foster, Spalding, Lincolnshire. On the same day the following gentlemen passed their first examination :—Pitcher, Arthur Henry, St. Thomas's Hospital ; Rogers, Henry Cripps, St. Bartholomew's Hospital. September 8th :—Hayward, John William, Seasalter, Canterbury ; Lungworthy, George Vincent, Modbury, Devon. September 15th :—Bennett, Francis Graham, Brighton ; Grace, Alfred, Downend, near Bristol ; Sheldon, Edwin Mason, Liverpool ; Shuttleworth, George Edward, Russell-place, W. ; Vipan, William Henry, Ely, Cambs ; Witherby, William Henry, Coombe, Croydon. On the same day, the following gentlemen passed their first examination :—Edwards, Charles George, St. Thomas's Hospital ; Wilton, Francis, St. Bartholomew's Hospital. September 22nd :—Butt, William Frederick, Mecklenburgh-street, W.C. ; Colthurst, James Bunter, Carey-street, W.C. ; Corbin, Thomas Wilson, Haringey park, Hornsey ; Matthews, Josiah Wright, Holgate-crescent, York.

MEDICAL VACANCIES.

CARMARTHENSHIRE LUNATIC ASYLUM.—For a Medical Superintendent. Salary, £300 per annum, with unfurnished apartments, coals, &c. All candidates must have had at least three years' experience in an asylum. Testimonials to be sent before October 20th, to Mr. Chas. Henry Hughes, Clerk to the Visitors, Carmarthen, of whom further information may be obtained.

BIRMINGHAM LYING-IN HOSPITAL.—For a Resident Surgeon. Particulars can be obtained from the secretary, at the Hospital, Broad-street, Birmingham.

APPOINTMENTS.

BARBOR, T., M.D.—Medical Officer for the Castlebellingham Dispensary District of the Ardee Union, County Louth, Ireland.

BARWIS, T. L. B., Esq.—Medical Officer for the Melton Mowbray and Ashfordby District of the Melton Mowbray Union.

BROOK, C., Esq.—Surgeon to the Lincoln County Hospital.

COTTIS, J., Esq.—Medical Officer for the parishes of Kirkbean, Colvend, and Southwick, Kirkcudbrightshire.

CURRIE, R., M.D.—Medical Officer for the parish of Tarbolton, Ayrshire.

DUCK, J., Esq.—Medical Officer for the district of Wednesbury West, in the West Bromwich Union.

FALL, J., Esq.—Medical Officer for the Alne district of the Easingwold Union, Yorkshire.

FULLER, C. C., Esq.—Lecturer on Dental Anatomy and Physiology to the Metropolitan School of Dental Science.

GORNALL, J. H., Esq.—Junior House-Surgeon to the Preston Dispensary.

GRIGG, N. B., Esq.—Medical Officer for No. 5 District of the Wellington Union, Somersetshire.

HAWTHORN, F. J., Esq.—House-Surgeon to the Poplar Hospital.

HECKFORD, N., Esq.—Resident Medical Officer to the Metropolitan Free Hospital.

HOLDEN, J., Esq.—Senior House-Surgeon to the Preston Dispensary.

HOLMAN, H. C., Esq.—Medical Officer for the Framfield district of the Uckfield Union, Sussex.

JOHNSON, J., Esq., Junior.—Medical Officer for the Hogsthorpe district of the Spilsby Union, Lincolnshire.

JONES, W., M.D.—Medical Officer for the Allonby district of the Wigton Union, Cumberland.

LEEDS, T., Esq.—Physicians' Assistant at the Royal Infirmary, Manchester.

LISLE, R. P., M.D.—Medical Officer for the Cardiff East District of the Cardiff Union.

MARTLAND, W., Esq.—Surgeon to the Blackburn Infirmary.

MORRIS, J. T., M.D.—Medical Officer for the Deddington district No. 2 of the Woodstock Union.

O'REILLY, R., Esq.—Medical Officer for the Athleague Dispensary district of the Roscommon Union.

PARRY, E., Esq.—Medical Officer for the Crickhowell Union Workhouse.

PEARSE, R. T., Esq.—Medical Officer for the Llandaff district, Workhouse, and Industrial Schools of the Cardiff Union.

PIZEY, G., Esq.—Medical Officer for the district No. 9 of the Bedminster Union.

RAE, M. J., M.D.—Physician to the Infirmary, Blackburn, Lancashire.

ROBINSON, J., M.B.—Medical Officer for the Workhouse of the Runcorn Union, Cheshire.

ROGERS, W. G., Esq.—Physicians' Assistant at the Manchester Royal Infirmary.

ROOTH, S., M.D.—Medical Officer for the Dronfield district of the Chesterfield Union, Derbyshire.

SMITH, T. S., M.B.—Senior House-Surgeon to the Royal Infirmary, Manchester.

SOFER, R. W., Esq.—Assistant House-Surgeon to the Sheffield General Infirmary.

SPENCE, James, F.R.C.S.—Professor of Surgery in the University of Edinburgh.

STARLING, G., Esq.—Medical Officer for the Woolwich West district of the Greenwich Union.

SUDLOW, A., Esq.—Medical Officer for the Castle Combe district of the Chippenham Union, Wilts.

TAYLOR, F., Esq.—Medical Officer for the No. 2 District of the Woodstock Union.

TURNER, Sidney, Esq.—House-Surgeon to Guy's Hospital.

WALKER, R., M.D.—Medical Officer for the East Budleigh district of the St. Thomas's Union, Devon.

WALKER, G. E., Esq.—Junior House-Surgeon to Royal Infirmary, Manchester.

WATSON, A. M., Esq.—House-Surgeon to the Peterborough Infirmary.

WATTS, W. H., Esq.—House-Surgeon to the General Lying-In Hospital, York-road, Lambeth.

WEATHERLEY, F., Esq.—Medical Officer for the No. 7 district of the Bedminster Union.

DEATHS.

ASTLE, Edmund, Esq., late Surgeon, R.N., at Newcastle-under-Lyme, on August 30th.

CHADWICK, F.R., M.R.C.S., at Burnham, Somerset, on September 12, aged 51.

DUKE, W., M.D., of St. Leonard's-on-Sea, on September 6, aged 58.

FREEMAN, R. G., M.D., at Greenwich, on September 13, aged 23.

JARDINE, Arthur D., M.R.C.S., at Milton Terrace, Chatham, on September 5, aged 24.

PALMER, H. T., M.R.C.S., of Woodstock, Mayor of the Borough, on August 21, suddenly, aged 64.

STANISTREET, T. D., Esq., Surgeon, at Mornington-road, Bow, on September 19, aged 49.

WOOD, G. E. W., M.D., late of East Sheen, Surrey, at St. Germain, near Paris, on September 9, aged 58.

BOOKS, ETC., RECEIVED.

"Phthisis and the Stethoscope: or the Physical Signs of Consumption."

By R. P. Cotton, M.D. Third edition.

"Automatic Mechanism, as Applied to the Construction of Artificial Limbs, in Cases of Amputation." By Frederick Gray.

"Annales de la Société de Médecine d'Anvers." For 1863.

"The American Quarterly Journal of the Medical Sciences."

"The Dental Review." (Quarterly).

"The Pharmaceutical Journal and Transactions," for September.

"The Social Science Review," for September.

"Journal de Médecine Mentale."

"Gazette Médicale de Paris," for September.

"Observations on Defects of Sight in Brain Disease." By J. Hughlings Jackson, M.D.

"On Keratitis." By W. S. Watson, F.R.C.S.

"Affram": A Poem. By C. Black, M.D.

"The Oxford University Herald," for September 17.

"The Brighton Herald," for September 15.

TO CORRESPONDENTS.

LIFE ASSURANCE.—If medical gentlemen will fill up professional reports before ascertaining whether there is a likelihood of being paid for their services, they have themselves more to blame than any one else. Our advice in the *MEDICAL MIRROR* (No. 8) should have made you more cautious. A respectable office would have given an explicit undertaking to remunerate medical men for their reports. In the prospectus laying before us of the British Union Assurance Company, we observe that it

is expressly stated that "Medical fees are paid by the office." This is a straightforward way of dealing with the question of professional remuneration for life assurance reports, and renders an office acting in this open and liberal manner entitled to a full share of professional support.

A. T., Yorkshire.—The poem "Affram," from which the verses given in the "Social Science Review" were quoted, is by Dr. C. Black, Mayor of Chesterfield, who has produced some other poems of considerable merit.

QUERIST.—We will cause inquiries to be made, and will write a private note to you at an early date.

B., Edinburgh.—The work which you name is an excellent one, and the only reason why it has not been already noticed in our pages is because it has not been forwarded to us in the usual manner for review. Every book which has yet been reviewed in the MEDICAL MIRROR has been sent to us, either by the publisher or author, for that purpose; and in those cases where copies of new books have not reached us, it is probable that the omission has been due to the apathy or prejudice of the publisher. It is of the greatest importance to authors to see for themselves that their works are actually sent to periodicals in which they may depend upon fair and impartial criticism.

DR. O'ROURKE.—The *Erodium* (recommended by Dr. W. Abbotts Smith, in our last number, as a remedy in dropsy) should, of course, be as recently procured as possible; as is the case with most vegetable substances, its remedial value is almost in a direct ratio to its freshness.

CATHOLICUS.—A list of the Lecturers in the Medical Faculty of the Catholic University in Dublin is given in the present number. Dr. Cryan, the obliging Honorary Secretary to the Medical School, would give you all the information which you might require.

IODINE.—The credit of having been the first to direct attention to the value of this substance as an antiseptic in the treatment of purulent sores, belongs to Dr. Wynn Williams.

DR. BISHOP.—We shall be glad to insert the paper in some future number.

ASSISTANT-SURGEON.—Your best remedy for the grievance of which you complain would be to leave the service. We would publish your letter if it would do you any good, but unfortunately complaints similar to your own of the state of the Army Medical Service fail to affect the pachydermatous officials. Nothing will convince them of the increasing unpopularity of the service, through the insulting measures which they have adopted, until the difficulty of filling up vacancies, and the gradually awakening indignation of the public at their proceedings, compel them to abandon the folly and obstinacy which have long characterised the (mis)management of Army medical affairs.

J.O.—Read Dr. Greenhow's work on "Diphtheria."

HIBERNIAN.—Sir Philip Crampton, Bart., M.D., died in 1858, aged 79.

A SUBSCRIBER.—You were quite right in your statement that the MEDICAL MIRROR is the cheapest monthly Medical periodical that has ever been published. Of the two journals which you name, the subscription to the "London Medical Review" was 13s. annually, and only 48 pages were contained in each number; the other, the "Edinburgh Medical Journal," costs 24s. per annum, each number containing 96 pages, while the MEDICAL MIRROR is transmitted free by post for 10s. annually, each number containing a minimum of 64 pages. Small type is liberally used when necessary, and no additional charge is made for extra numbers. Our last number, for instance, contained 104 pages, 68 of which were printed in small type; but no advance was made in the price of the journal.

MEDICAL EDUCATION

IN

SCOTLAND AND IRELAND.

THE regulations of the various Scotch and Irish Universities, Colleges, and Examining Boards which grant qualifications to Practise Medicine and Surgery, with particulars concerning the Scotch and Irish Medical Schools and Hospitals.

UNIVERSITIES AND COLLEGES IN SCOTLAND.

UNIVERSITY OF EDINBURGH (1582).

PRIN., Sir David Brewster, K.T. SEC., Mr. A. Smith.

FACULTY OF MEDICINE.—*Mat. Med. and Pharm.*, Dr. Christison.—*Chem.*, Dr. Playfair.—*Surg.*, Mr. J. Spence.—*Medical Jurisprudence*, Dr. Mac-lagan.—*Inst. of Med.*, Dr. Bennett.—*General Pathology*, Dr. Henderson.—*Clinical Surgery*, Prof. Syme.—*Clin. Med.*, Drs. Laycock and Bennett.—*Anat.*, Prof. Goodsir.—*Nat. Hist.*, Mr. Allman.—*Mid. and Dis. of Women and Child.*, Dr. Simpson.—*Pract. of Phys.*, Dr. Laycock.—*Pract. Anat.*, Prof. Goodsir.—*Pract. and Analyt. Chem.*, Dr. Playfair.—During the summer session lectures will be given on the following branches of education: *Bot.*, Dr. Balfour.—*Histology*, Dr. Bennett.—*Med. Jurisp.*, Dr. Mac-lagan.—*Clin. Med.*, Dr. Bennett.—*Clin. Surg.*, Prof. Syme.—*Comp. Anat. and Anat. Demonst.*, Prof. Goodsir.—*Pract. Chem. and Pharmacy*, Dr. Playfair.—*Pract. Anat.*, Prof. Goodsir.—*Nat. Hist.*, Prof. Allman.—*Med. Psychol.*, Dr. Laycock (with practical instruction at an Asylum).

Three Medical Degrees are conferred by this University, viz.: Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.). The degree of C.M. is not conferred on any person who does not also at the same time obtain the degree of M.B. No candidate is admitted to a professional examination who has not passed a satisfactory examination in general subjects of education, a full list of which can be obtained upon application to the Secretary. No one is admitted to the degree of M.B. or C.M. who has not been engaged in medical and surgical study for four years, and who cannot produce certificates of attendance upon lectures, and of two years' attendance upon the medical and surgical practice of a recognised general hospital. He must also produce certificates of having been engaged in practical pharmacy, and of having attended for at least six months the out-practice of a hospital or dispensary, or of a duly qualified practitioner. One of the four years of study required must be in the University of Edinburgh, and another must either be in the same University,

or in some other University entitled to grant the degree of M.D. Every candidate must deliver, before March 31st of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine, the following : 1. A declaration that he is twenty-one years of age, and has completed his apprenticeship. 2. A statement of his studies, with proper certificates. 3. A thesis composed by himself, to be approved by the Medical Faculty. Each candidate is examined, both in writing and *vivâ voce* ; *first*, in Chemistry, Botany, and Natural History ; *secondly*, in Anatomy, Institutes of Medicine, and Surgery ; and *thirdly*, in Materia Medica, Pathology, Practice of Medicine, Clinical Medicine, Clinical Surgery, Midwifery, and Medical Jurisprudence. The examinations in Anatomy, Chemistry, Institutes of Medicine, Botany, and Natural History are conducted, as far as possible, by demonstrations of objects placed before the candidates ; and those on Medicine and Surgery in part by Clinical Demonstrations in the hospital. Students are admitted to examination on the first division of these subjects at the end of their second year, to the second division at the end of the third year, and to the final division at the end of their fourth year. If candidates prefer, they may be admitted to examination on the first two divisions at the end of their third year, or to the three, taken together, at the end of their fourth year. Rejected candidates are not admitted again to examination until after another year's study. *M.D. Degree.*—The degree of M.D. may be conferred on any candidate who has obtained the M.B. degree, and is of the age of twenty-four years, and has been engaged, subsequently to his having received the M.B. degree, for two years in attendance at an hospital, in the military or naval medical service, or in medical and surgical practice ; provided always, that the degree of M.D. shall not be conferred on any person unless he be a graduate in Arts of some British University, or unless at the period of his obtaining the M.B. degree, or within three years thereafter, he has passed a satisfactory examination in Greek, and Logic or Moral Philosophy ; and in one at least of the following subjects, viz., French, German, Higher Mathematics, and Natural Philosophy.

The foregoing regulations refer to candidates who began their medical studies after February 4th, 1861.

Candidates who commenced their medical studies by attendance on classes before the 4th day of February, 1861, are entitled to appear for examination for the degree of Doctor of Medicine after four years' study, on completing their twenty-first year, and without having taken the degree of Bachelor of Medicine. They are also exempted from the preliminary examinations, and require only to undergo an examination on Latin. They are also exempted from attendance on practical chemistry, and practical midwifery, and require only three months of clinical surgery, and eighteen months of hospital attendance.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.

SECRETARY, Dr. R. Haldane.

The College consists of Fellows and Members, and grants Licences to Practise Medicine and Surgery.

1. THE LICENCE.—Every candidate for the licence must be at least twenty-one years of age, produce certificates of attendance on lectures in a medical school during four years, and pass a preliminary examination in subjects of general education, unless he have previously done so before some other recognised Licensing Board. The professional examination is divided into two parts—(1) Anatomy, Physiology, Chemistry ; and (2) Materia

Medica and Pharmacy, Pathology and Pathological Anatomy, Surgery, Practice of Medicine, Midwifery, Medical Jurisprudence. The examinations are partly *viva voce*, partly by written papers, and, whenever practicable, candidates may be examined upon actual cases of disease. The two divisions of the professional examination may be passed separately, or at the same meeting. Properly qualified practitioners, of five years' standing, and of good character, are admissible to the licence after examination upon the following subjects only: Practice of Medicine and Pathology, Materia Medica, Midwifery, and Medical Jurisprudence.

2. THE MEMBERSHIP.—Any licentiate of a College of Physicians, or graduate of a British University, with whose knowledge of medical and general science the College may be satisfied, may be elected a Member, provided that he has attained the age of twenty-four.

3. THE FELLOWSHIP.—Any Member of at least one year's standing is eligible as a candidate for election to the Fellowship, a majority of three-fourths of the Fellows present at a quarterly meeting being requisite for carrying the election.

FEES.—For the licence, ten guineas; for the Membership, thirty guineas; and for the Fellowship, thirty guineas, exclusive of stamp duty.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.

(Founded 1505.)

This College grants the diploma of Licentiate in Surgery. Four years' professional study is required of all candidates who have commenced their studies after 1861, and a preliminary examination in general education is also required, unless a similar examination has already been successfully undergone by the candidate before some other Examining Board. The professional examination is divided into two parts—(1) on Anatomy, Physiology, and Chemistry, which shall take place not sooner than the end of the second winter session; and (2) on Surgery, Surgical Anatomy, Medicine, Midwifery, Materia Medica, and Medical Jurisprudence, to take place not sooner than the termination of the winter session of the last year of study. Candidates who were in possession of a degree or licence in medicine prior to October 1st, 1861, are exempted from the first professional examination. The fee for the diploma is 10*l*.

THE FELLOWSHIP.—Any Licentiate or Member of a College of Surgeons in Edinburgh, London or Dublin, who has attained the age of twenty-five, and is of good character, is eligible as a candidate for election to the Fellowship, the fee for which is 25*l*.

UNIVERSITY OF GLASGOW.

CLERK TO SENATE; Prof. D. H. Weir.

MEDICAL DEPARTMENT. WINTER SESSION.

Surg., Mr. Lister.—*Pract. Med.*, Dr. Gairdner.—*Chem.*, *Pract. Chem.*, and *Analyt. Chem.*, Dr. T. Anderson.—*Anat.*, *Anat. Demonstr.*, and *Pract. Anat.*, Dr. A. Thomson.—*For. Med.*, Dr. Rainy.—*Midwf.*, Dr. Pagan.

SUMMER SESSION.

Bot., Dr. Walker Arnott.—*Mat. Med.*, Dr. J. Easton.—*Eye* (Waltonian Lectures), Dr. Mackenzie.—*Inst. Med.*, Dr. Buchanan.—*Zoology*, Dr. Rogers.

Courses of Lectures on General and Surgical Anatomy, Practical and Analytical Chemistry, and Practical Medicine are also delivered by the respective Professors. The Anatomical Rooms and Chemical Laboratory are open during both the winter and summer sessions.

Class Fees.—For each class, 3*l.* 3*s.*, with the following exceptions, viz., Practical Anatomy, six months (when taken along with Lectures on Anatomy), Practical Chemistry, three months, and Lectures on the Eye, each 2*l.* 2*s.*; Analytical Chemistry, 4*l.* 4*s.* for three months, including apparatus and re-agents.

Royal Infirmary.—Fee for two years or perpetual, 10*l.* 10*s.*; for one year 5*l.* 5*s.* A deduction is made from the fees in the case of those who have previously attended an hospital for eighteen months, or who hold a medical or surgical diploma.

Obstetric Hospital and Practical Midwifery.—Attendance on cases of Midwifery in connexion with this hospital, and under the direction of the Professor of Midwifery. Fee for six months, 1*l.* 1*s.*

Eye Infirmary.—Fee for six months, 2*l.* 2*s.*, or to those attending the Lectures on the Eye, 1*l.* 1*s.*

Enrolment. Library and Reading Rooms.—By the regulations of the Senate, every student must, at the beginning of the session, enrol his name in the album of the University at the Registrar's Office. No student can be enrolled for the winter session after a period of fifteen days, according to the regulations laid down by the General Medical Council. The matriculation fee is 1*l.*

Hunterian Museum.—This museum, illustrative of anatomy and the various departments of medicine, natural history, antiquities, and the fine arts, is open to the students of the Natural History Class during the course, and to medical students at all times, on the purchase of the catalogue of the medical department.

Botanic Garden.—The botanic garden is adapted to the illustration of the Lectures on Botany, and is open to the students of the Botanical Class during the session.

Bursaries tenable by Medical Students.—The Brisbane Bursary, of 50*l.* yearly, is held for four years by a student of medicine, who is Master of Arts. The Walton Bursary of 20*l.* yearly, is held by a medical student (a native of England being preferred) for four years. The Armagh Bursaries, three in number, amounting each to 15*l.* yearly for three years, are open to students of divinity and medicine, who have taken the degree of M.A.

Three degrees in medicine are granted by this University, viz., M.B., C.M., and M.D.

1. *Degrees of Bachelor of Medicine and Master in Surgery.*—Candidates for these degrees are required to pass a preliminary general examination in English Latin, Arithmetic, the Elements of Mathematics, and of Mechanics. They are also required, previous to their first professional examination, to pass an examination in at least two of the following subjects, selected by the candidate, viz.:—Greek, French, German, Higher Mathematics, Natural Philosophy, Natural History, Logic, and Moral Philosophy. It is desirable that candidates should pass this before the commencement of their medical curriculum. Four years' professional study is required, and the professional examination is divided into three divisions, corresponding to those enumerated under the regulations of the University of Edinburgh.

M.D. Degree.—The regulations for candidates for this degree, are similar to those of the University of Edinburgh.

Fees.—For the degree of M.B., 15*l.*; for the degree of C. M. (in addition to the fees for M.B.) 5*l.*; for the degree of M.D., 15*l.*

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

(Instituted in 1599 by Royal Charter).

Every candidate for the licence, commencing his studies after October, 1861, must pass a preliminary general examination, either at Glasgow, or before one of the recognised licensing boards. Four years of professional study are required. The professional examination is divided into two parts, the first embracing Anatomy, Physiology, and Chemistry, to be undergone at the end of the second winter session; and the second, including the other branches of study, to be passed at the termination of the student's curriculum. The fee for the diploma is 10*l*.

UNIVERSITY OF ABERDEEN.

LECTURES. WINTER SESSION.

Anatomy, Prof. J. Struthers, M.D., 3*l*. 3*s*.—*Practical Anatomy and Demonstrations*, Prof. J. Struthers, M.D., 2*l*. 2*s*.—*Chemistry*, Prof. Brazier, 3*l*. 3*s*.—*Institutes of Medicine*, Prof. G. Ogilvie, M.D., 3*l*. 2*s*.—*Practice of Medicine*, Prof. Macrobin, M.D., 3*l*. 3*s*.—*Surgery*, Prof. W. Pirrie, 3*l*. 3*s*.—*Midwifery and the Diseases of Women and Children*, Prof. R. Dyce, M.D., 3*l*. 3*s*.—*Natural History*, Prof. J. Nicol, 3*l*. 3*s*.—*Medical Logic and Jurisprudence*.—Prof. F. Ogston, M.D., 3*l*. 3*s*.—*Nat. Phil.*, Prof. Thomson, 3*l*. 3*s*.—Matriculation Fee (including all dues for winter and summer sessions), 1*l*.

SUMMER SESSION.

Botany, Prof. G. Dickie, M.D., 3*l*. 3*s*.—*Materia Medica*, Prof. Harvey, M.D., 3*l*. 3*s*.—*Practical Anatomy and Demonstrations*, Prof. J. Struthers, M.D., and the Demonstrator, 2*l*. 2*s*.—*Zoology and Comparative Anatomy*, Professor Nicol, 3*l*. 3*s*.—*Practical Chemistry*, Prof. Brazier, 3*l*. 3*s*.—*Histology*, Prof. Ogilvie, M.D., and Mr. J. Thomson, 2*l*. 2*s*.

HOSPITAL PRACTICE at the Royal Infirmary, which contains upwards of 280 beds.—*Phys.*, Drs. J. F. Smith, Williamson, Harvey and Reith.—*Surgs.*, Messrs. Keith, Pirrie, Kerr, and Fiddes.—*Ophthalmic Surgeon*, Dr. Wolfe.—*Pathologist*, Dr. Beveridge.—*Dental Surgeon*, Mr. Williamson.—*Lectures on Clinical Medicine*, Dr. Kilgour; 1st course, 2*l*. 2*s*.; 2nd, 1*l*. 1*s*.—*Lectures on Clinical Surgery*.—Mr. Keith; 1st course, 2*l*. 2*s*.; 2nd, 1*l*. 1*s*.—*Lectures on Ophthalmic Surgery*, Dr. Wolfe.—*Lectures on Pathology and Morbid Anatomy*, Dr. Beveridge. Perpetual fee to the hospital. 6*l*. 6*s*.; first year, 3*l*. 10*s*.; second year 3*l*. The Lunatic Asylum, under the care of Dr. Macrobin, *Cons. Phys.*, and Dr. R. Jamieson, *Res. Phys.*, contains above 300 patients. A limited number of pupils are permitted to witness the practice pursued in this asylum, in the treatment of mental disease. A course of clinical instruction in the nature and treatment of insanity is given during the summer session by Dr. Jamieson. Fee, 2*l*. 2*s*.

The regulations for granting medical degrees, framed in conformity with an Ordinance of the Scottish Universities' Commissioners (March 16, 1861), are similar to those in force at the other Scotch Universities, as detailed under the head of the University of Edinburgh. The degrees granted are the same, viz., M.B., C.M., and M.D. The fee for the diploma of M.B., is fifteen guineas, five guineas being payable upon passing each of the three parts into which the examination is divided. For the degree

of C.M. an additional fee of five guineas is required ; and for that of M.D., an additional payment of five guineas, and the charge for stamp duty, are also required.

UNIVERSITY OF ST. ANDREWS.

EXAMINERS.

Anatomy and Physiology, John Struthers, M.D.—*Botany and Natural History*, William Macdonald, M.D.—*Chemistry*, Mr. Foster Heddle, M.D.—*Materia Medica and Medical Jurisprudence*, Oswald Home Bell, M.D.—*Midwifery*, Drs. Matthew Duncan and Keiller.—*Practice of Medicine*, Andrew Anderson, M.D.—*Surgery*, George Buchanan, M.D.

The regulations relating to the Medical Degrees at St. Andrew's correspond to those of the other Scotch Universities.

SCHOOLS OF MEDICINE IN SCOTLAND.

ANDERSON'S UNIVERSITY, GEORGE STREET, GLASGOW.

WINTER SESSION.

Chemistry and Practical Chemistry, Dr. Penny.—*Surgery*, Dr. G. H. B. Macleod.—*Institutes of Medicine, Physiology*, Dr. E. Watson.—*Anatomy, Anatomical Demonstrations, and Dissection*, Dr. G. Buchanan.—*Practice of Medicine*, Dr. Cowan.—*Materia Medica*, Dr. Morton.—*Hospital Practice and Clinical Lectures in Royal Infirmary*, by the physicians and surgeons.

SUMMER SESSION.

Botany, Mr. Kennedy.—*Midwifery*, Dr. Wilson.—*Medical Jurisprudence*, Dr. Leishman.—*Surgical and Practical Anatomy, and Osteology for Beginners*, Dr. George Buchanan.—*Practical Medical Chemistry*, Dr. Penny.—*Operative Surgery*, Dr. G. H. B. Macleod. *Hospital Practice and Clinical Lectures in Royal Infirmary*, by the Physicians and Surgeons. *Class Fees*, for each of the above courses of lectures, first session, 2*l.* 2*s.* ; second session, 1*l.* 1*s.* ; afterwards free. *Anatomy Class Fees*—For both courses (lectures and demonstrations), first session, 4*l.* 4*s.* ; second session, 4*l.* 4*s.* ; afterwards free. *Practical Anatomy*.—The dissecting-room is free for two sessions to those who attend both courses of anatomy. After the second year the fee for practical anatomy is 1*l.* 1*s.* per session. *The Fees* for all the lectures and hospital practice required of candidates for the diplomas of physician and surgeon, amount to 40*l.* *The extensive Laboratory* of the Institution, fitted up expressly for instruction in practical and analytical chemistry, is open daily, from eleven to three o'clock. Fee, 1*l.* 1*s.* per month. No charge for apparatus and materials in the course of Practical Medical Chemistry, the fee for which is 2*l.* 2*s.* *The Materia Medica Museum* contains a valuable collection of plates and specimens, to which additions are constantly being made.

Students attending the medical classes have the opportunity of witnessing the practice of the following hospitals, viz., Lying-in Hospital, 1*l.* 1*s.* for six months ; Eye Infirmary, 2*l.* 2*s.* for six months ; Royal Infirmary, 600 beds, 10*l.* 10*s.* perpetual, including medical and surgical

clinical lectures, which are delivered four times weekly. The patients admitted to the Eye Infirmary average 1,600 annually; those admitted to the Royal Infirmary, 4,000; besides 10,000 out-patients, treated at the Dispensary. Average number of surgical operations, 200 annually.

Gentlemen attending the Botany Class have free admission to the Botanic Garden.

The *University Museum*, a splendid collection of specimens of natural history, including more particularly those of zoology, geology, mineralogy, and antiquities, is open to all students attending the University. A valuable medical library is also attached to the medical school.

SURGEONS' HALL, EDINBURGH.

WINTER SESSION.

The following courses of lectures on medical and surgical science, and also those delivered in the University, qualify for examination for the diploma of the Royal Colleges of Physicians and Surgeons.

Surgery, Dr. Watson.—*Surgery* (8, Infirmary-street), Mr. A. M. Edwards.—*Surgery* (1, Surgeons' Square), Dr. Joseph Ball.—*Chemistry* (School of Arts, Adam Square), Dr. Stevenson Macadam.—*Practical Chemistry and Analytical Chemistry*, Dr. Stevenson Macadam (at Surgeons' Hall).—*Chemistry* (4, High School Yards), Dr. A. C. Brown.—*Practical Chemistry and Analytical Chemistry*, Dr. A. C. Brown (4, High School Yards).—*Physiology*, Dr. Sanders.—*Medical Jurisprudence*, at two p.m., Dr. Littlejohn.—*Clinical Medicine* (Royal Infirmary), at twelve noon, Drs. Warburton Begbie, Sanders, J. Matthews Duncan, and R. Haldane.—*Clinical Surgery* (Royal Infirmary), at twelve noon, Dr. Gillespie.—*Anatomy and Anatomical Demonstrations, and Practical Anatomy*, Dr. P. D. Handyside.—*General Pathology and Pathological Anatomy*, Dr. Grainger Stewart.—*Practice of Physic*, Dr. R. Haldane.—*Practice of Physic* (4, High School Yards), Dr. Warburton Begbie.—*Diseases of Children* (Sick Children's Hospital), Dr. Keiller.—*Natural Philosophy* (School of Arts), W. Lees, A.M.

Practical Instruction.—Royal Infirmary, perpetual ticket, at one payment, 10*l.*; annual, 5*l.* 5*s.*; Half-yearly, 3*l.* 3*s.*; separate payments for two years and a half entitle the student to a perpetual ticket. Sick Children's Hospital, ticket, three months, 1*l.* 1*s.*; perpetual, 2*l.* 2*s.* Dispensary Visit—Royal Public Dispensary, and New Town Dispensary, each, six months, 3*l.* 3*s.* Practical Midwifery—Royal Maternity Hospital, Royal Public Dispensary, New Town Dispensary, ticket, 1*l.* 3*s.* Diseases of the Eye, Ear, and Teeth—Dispensaries, Cockburn Street. Practical Pharmacy—Royal Public Dispensary, New Town Dispensary, six months, 3*l.* 3*s.* Vaccination—Dr. Husband, Royal Dispensary.

Fees.—For the first of each of the above courses, 3*l.* 5*s.*; for the second, 2*l.* 4*s.*; perpetual, 5*l.* 5*s.* To those who have already attended a first course in Edinburgh, the perpetual fee for that class is 2*l.* 4*s.* The fees for the following courses are:—Natural Philosophy, 2*l.* 2*s.*; Practical Chemistry and Practical Anatomy, 3*l.* 3*s.*; Anatomical Demonstrations, 2*l.* 2*s.*, when taken along with Practical Anatomy, 1*l.* 1*s.*; Analytical Chemistry, 2*l.* a month, 5*l.* for three months, or 10*l.* for the winter session.

SUMMER SESSION.

Midwifery, Dr. Keiller.—*Midwifery* (4, High School Yards), Dr. J. Matthews Duncan.—*Medical Jurisprudence*, Dr. Littlejohn.—*Materia Medica and Dietetics*, Dr. Scoresby Jackson.—*Clinical Surgery*, Dr. Gillespie.—*Clinical Medicine*, Drs. Warburton Begbie, Sanders, J. Matthews Duncan,

and R. Haldane.—*Practical and Analytical Chemistry*, Dr. Stevenson Macadam.—*Practical and Analytical Chemistry*, Dr. A. C. Brown (4, High School Yards).—*Practical Anatomy and Demonstrations, and Comparative Anatomy*, Dr. P. D. Handyside.—*Pathological Anatomy*, Dr. Grainger Stewart.—*Natural Philosophy*, W. Lees, A.M.—*Histology*, Dr. Sanders.—*History of Medicine*, Dr. Warburton Begbie.—*Military Surgery*, Dr. P. H. Watson.—*Surgical Appliances*, Mr. Edwards.—*Vaccination*, Dr. Husband.—*Diseases of the Eye*, Dr. Argyll Robertson.—*Insanity*, Dr. Skae.

IRISH UNIVERSITIES AND COLLEGES.

UNIVERSITY OF DUBLIN (TRINITY COLLEGE), Founded 1591.

Chancellor, His Grace the Lord Primate.—*Vice-Chancellor*, Rt. Hon. F. Blackburn.—*Provost*, Dr. Macdonnell.—*Reg. Prof. Phys.*, Dr. W. Stokes.—*Prof. Anat. and Physiol.*, Dr. B. M'Dowel.—*Chem.*, Dr. J. Apjohn.—*Bot.*, Dr. W. Harvey.—*Surg.*, Dr. R. W. Smith.—*Pract. Med.*, Dr. J. Banks.—*Mat. Med.*, Dr. J. Osborne.—*Inst. Med.* Dr. R. Law.—*Mid.*, Dr. F. Churchill.—*Med. Jurisp.*, Dr. T. Brady.—*Med. Reg.*, Rev. S. Haughton, M.D.

The following degrees and licences in medicine and surgery are granted by the University of Dublin, and are entitled to be registered under the Medical Act:—1. Bachelor in Medicine; 2. Doctor in Medicine; 3. Master in Surgery; 4. Licentiate in Medicine; 5. Licentiate in Surgery. The qualifications requisite for these licences and degrees are the following:—

1. *Bachelor of Medicine*.—The candidate must be a B.A. of Dublin, Oxford, or Cambridge. He must have spent four years in the study of medicine, including nine months' attendance on the clinical instruction given in Sir P. Dun's Hospital, and nine months' attendance in clinical instruction in one of the Dublin hospitals.

2. *Doctor of Medicine*.—The candidate must be a B.A. of three years' standing. No qualification in medicine is requisite, besides that necessary for the M.B.

3. *Master in Surgery*.—The candidate must be a B.A., and have had four years' study and attendance on Lectures, including attendance on clinical instruction of three sessions, of nine months each, in one of the recognised Dublin hospitals. The examination, like that for the M.B. degree, is conducted publicly, and is of two days' duration, partly written and partly oral.

4. *Licentiate in Medicine*.—The candidate must have kept one full year in Arts, and he must also have attended four years' medical instruction, similarly to the M.B. candidates.

5. *Licentiate in Surgery*.—The regulations correspond to those for the L.M.

The medical library at Sir P. Dun's Hospital, the College Herbarium, and the Botanic Gardens of the University, are open, under certain regulations, to all matriculated students.

QUEEN'S UNIVERSITY IN IRELAND.

This University is the centre of the Queen's Colleges of Belfast, Cork,

and Galway, the official department being carried on at Dublin Castle. The examinations are held twice in each year, in June and September.

Each candidate for the degree of M.D., is required to have been admitted a matriculated student of one of the Colleges of the Queen's University in the Faculty of Medicine; to have attended, in one of the Queen's Colleges, lectures on one modern language for six months, and on Natural Philosophy for six months; to have attended four years' study in recognised medical schools and hospitals; to pass two Examinations. *First Medical Examination*.—To be passed after the student has completed two years' study. The subjects for examination are those comprised in the lectures attended during the first part of the curriculum. *Second Medical Examination*.—The candidates are examined on the subjects comprised in the second part of the curriculum. The examinations are conducted partly by written papers, partly *viva voce*. The fee for the degree of M.D. is 5*l*.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

The College of Physicians in Dublin was founded in 1660, by Dr. John Stearne, Fellow and Professor of Physic in Trinity College, Dublin; was incorporated by Royal Charter of King Charles II, A.D. 1667; and re-incorporated by King William and Queen Mary, A.D. 1692, under the title of "The King and Queen's College of Physicians in Ireland."

Candidates for the licence are required to have passed a preliminary examination in general literature, before one of the Examining Boards recognised by the Medical Council, and to produce certificates of four years' study and attendance on lectures and hospital practice. The examination is divided into two parts. *First Part*.—Anatomy, Physiology, Botany, and Chemistry. *Second Part*.—Materia Medica, Practice of Medicine, Medical Jurisprudence, and Midwifery. The first part of the examination can be passed at the end of two years' study; or the whole of the subjects can be taken at the end of the four years' study. Graduates in Medicine of a British University, fellows, members, or licentiates of the London or Edinburgh College of Physicians, and graduates or licentiates in Surgery, are only required to undergo the second part of the examination. Gentlemen who have obtained the licence, can present themselves for examination for the *Licence in Midwifery*.

Fees.—For the licence, 15 guineas, of which 5 guineas are payable at the first, and 10 guineas at the final examination. For the Midwifery Diploma, 3 guineas.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The diplomas granted are three; that conferring the rank of Fellow, that of Licentiate, and that of Licentiate in Midwifery. 1. *The Licence*.—Candidates are required to be registered as pupils of the College, for which a registry-fee of five guineas is charged, to produce certificates of having passed an examination in Greek and Latin; of having been engaged in the study of his profession for not less than four years; and of having attended hospital practice for three years. Candidates are examined upon Anatomy, Physiology, the Theory and Practice of Medicine and Surgery, Materia Medica, and the form of Prescriptions; and shall perform such surgical operations or dissections, or explain such anatomical or pathological preparations as the examiners may require. Fee for the licence, 20

guineas. 2. *The Fellowship*.—Every registered pupil or licentiate can be admitted to examination for the Fellowship, upon production of certificates that he is twenty-five years of age; that he has passed a preliminary general examination; that he is of good character; that he has been engaged six years in the acquisition of professional knowledge, during three of which he must have studied in schools and hospitals recognised by the Council. He must also have been a house-surgeon or dresser in a recognised hospital; and must present a thesis on some medical subject, or clinical reports, with observations taken by himself of six or more cases of disease. Any candidate who is a B.A. will be admitted to examination after five years' study. Licentiates of the College are eligible for this examination at the expiration of ten years from the date of their diploma. 3. *The Diploma in Midwifery*.—Candidates must be Fellows or Licentiates of the College, and produce certificates of attendance on a course of Lectures on Midwifery, and upon the practice at a lying-in institution for six months.

APOTHECARIES' HALL OF IRELAND.

Candidates for the licence must undergo a preliminary examination in subjects of general education, and a professional examination, divided into two parts; the first after two, and the second after four, years' study. The examinations are partly written, partly oral.

The preliminary examination is held four times in the year, viz., on the third Friday in January, April, May, and October. The pass examinations are held twice monthly.

IRISH HOSPITALS AND SCHOOLS OF MEDICINE.

THE ADELAIDE HOSPITAL,

Peter-street, Dublin.

Phys., Drs. J. F. Duncan and R. Mayne; *Surgs.*, Messrs. A. J. Walsh, M.D., J. Morgan, J. K. Barton, M.D., and B. Wills Richardson; *Apoth.*, Mr. Lyon; *Sec.*, Mr. J. Reid.

This hospital contains 100 beds, of which 24 are devoted to the special Diseases of Infants and Children. Two detached wards have been recently added to the hospital for the treatment of Fever Cases.

Clinical Instruction.—Two Medical and Two Surgical Lectures, including Lectures on the Diseases of the Eye, will be delivered in each week, besides instruction being given daily by the physicians and surgeons. Practical Demonstrations in the use of the Stethoscope and Microscope, as applied to the diagnosis of disease, will be given during the Session.

Fees.—For nine months' hospital attendance, 8*l.* 8*s.*; for six months, 6*l.* 6*s.*; for three months, 3*l.* 3*s.*; perpetual pupils (paid at entrance), 21*l.*

Prizes.—Two Medical, and two Surgical, Prizes will be given at the close of the Session.

CARMICHAEL SCHOOL (FORMERLY RICHMOND HOSPITAL SCHOOL) OF ANATOMY, MEDICINE, AND SURGERY,

North Brunswick-street, Dublin.—Founded, 1828.

Anatomy and Physiology, Mr. H. Curran.—*Theory and Practice of Surgery, and Operative Surgery*, Dr. R. McDonnell.—*Theory and Practice of Medicine*, Dr. Cruise.—*Midwifery and Diseases of Women and Children*, Dr. Jennings.—*Materia Medica and Pharmacy*, Dr. Frazer.—*Chemistry*, Dr. Davy.—*Descriptive and Practical Anatomy*, Dr. Corley and Dr. O'Grady.—*Medical Jurisprudence*, Dr. O'Reilly.—*Botany*, Dr. Campbell.—Fee for each of the above courses of lectures, 3*l.* 3*s.*

The Museum comprises a rare and valuable collection of Anatomical and Pathological Preparations. There is also an extensive Museum of *Materia Medica*.

This school is in the immediate vicinity of the Richmond Surgical, the Whitworth Medical, and the Hardwicke Fever, Hospitals, containing in all 300 beds; Steevens's Hospital, Jervis-street Hospital, the Apothecaries' Hall, Great Britain-street Lying-in Hospital, and Richmond Lunatic Asylum are also within easy reach.

CARMICHAEL PREMIUMS.—By a bequest of the late Richard Carmichael, Esq., these premiums, to the value of 50*l.*, have been continued. Public examinations will therefore be held, and the premiums awarded as usual, at the termination of the course, to those who answer best in the various branches of medical science taught in this school.

SUMMER SESSION.

The summer session, during which regular courses of lectures will be delivered on Practical Chemistry, *Materia Medica*, Botany, and Medical Jurisprudence, will commence immediately after the Easter recess. Carmichael Premiums will be awarded in these classes at the termination of the session.

CATHOLIC UNIVERSITY, DUBLIN (SCHOOL OF ANATOMY, MEDICINE, AND SURGERY),

Cecilia-street, Dame-street.

LECTURERS.

Anatomy, and Physiology, Drs. Hayden and Cryan.—*Chemistry*, Dr. W. K. Sullivan.—*Surgery*, Mr. A. Ellis.—*Practice of Medicine and Pathology*, Dr. R. D. Lyons.—*Materia Medica*, Dr. F. B. Quinlan.—*Medical Jurisprudence*, Dr. S. M. M'Swiney.—*Theory and Practice of Midwifery*, Dr. J. A. Byrne.—*Pathology*, Dr. R. D. Lyons.—*Natural Philosophy*, Mr. H. Hennessy.—*Logic*, Dr. D. B. Dunne.—*Demonstrators of Anatomy*, The Professors of Anatomy and Physiology.

At the termination of the session, public examinations will be held, when, in addition to the usual prizes in each class, four gold medals will be awarded for the best answering in the three following combined subjects: 1. Anatomy, Physiology, and Chemistry. 2. Surgery, and Practice of Medicine. 3. Practical Chemistry, *Materia Medica*, and Medical Jurisprudence. 4. Midwifery and the Diseases of Women and Children. The

examinations consist of three parts : written, *viva voce*, and practical or demonstrative.

CITY OF DUBLIN HOSPITAL, UPPER BAGGOT-STREET.

Founded 1832 ; Enlarged 1851.

Cons. Phys., Prof. Apjohn and Dr. Croker.—*Phys. and Surgs.*, Dr. A. Jacob, Dr. T. E. Beatty, Dr. C. Benson, Dr. W. Hargrave, Dr. T. G. Geoghegan, Mr. J. Tufnell, and Dr. J. H. Power.—*Res. Apoth.*, Mr. W. J. Croly.

The hospital contains 104 beds, and its annual average number of in-patients is 800 ; out, 17,000.

There are special Ophthalmic and female wards. Lectures on the former class of cases are delivered by Dr. Jacob, and on Uterine Disorders by Dr. Beatty.

The Purser Studentship of 20*l.* per annum (with apartments), founded by William A. Purser, Esq., a former pupil of this hospital, is open to all students, according to merit.

Fee for winter six months, 6*l.* 6*s.* ; summer session, 3*l.* 3*s.* ; both taken together, 8*l.* 8*s.*

THE COOMBE LYING-IN HOSPITAL.

Masters, Drs. John Ringland and James H. Sawyer.

The hospital contains 40 beds ; the number of patients annually admitted into the labour wards amount to nearly 750, whilst those attended at their own homes from the hospital considerably exceed double that number.

The Winter and Summer Courses of Clinical Instruction commence on the first Monday in November and May respectively. Candidates for the diplomas of the different Colleges and Halls are required, by recent regulations, to attend a six months' course of Practical Midwifery ; but gentlemen can enter at any time during the year for six months from the date of entrance.

Lectures on Midwifery and Diseases of Women and Children are delivered by the two Masters.

Fees.—Intern pupils, for six months, ten guineas ; extern pupils, four guineas ; lectures, each course, two guineas ; Registrar's fee for diploma of proficiency, 10*s.* 6*d.*

DR. STEEVENS'S HOSPITAL AND MEDICAL COLLEGE.

The hospital contains 250 beds, and is provided with distinct wards for the treatment of fevers, syphilis, diseases of the eyes, and diseases of females.

LECTURERS.

Anat. and Phys., Mr. Hamilton.—*Descr. and Surg. Anat.*, Mr. Symes.—*Pract. Anat. and Diss.*, Mr. Symes and Mr. Swan.—*Chem.*, Dr. Aldridge.

—*Pract. Chem.*, Dr. Cameron.—*Mat. Med.*, Dr. Gordon.—*Bot.*, Dr. Grimshaw.—*Nat. Phil.*, Dr. Cameron.—*Surg.*, Mr. Colles.—*Midw.*, Dr. Hardy.—*Med.*, Dr. Freke.—*Med. Jur.*, Dr. Pollock.—*Comp. Anat.*, Dr. Hamilton.—*Pract. Pharm.*, Mr. Savage.

Dressers.—There is accommodation in the hospital for two medical, and six surgical resident pupils.

Midwifery.—A maternity department, for the delivery of lying-in women at their own homes, is conducted under the superintendence of the physician-accoucheur. A midwifery diploma is granted at the end of the session to such pupils as have attended a sufficient number of cases, and have passed a satisfactory examination. Two assistants are appointed each year by competitive examination; salary, 30*l.* per annum each.

The Museum and a comfortable *Reading Room* are open daily. There is a large *Lending Library* of every work of value in connexion with the medical profession.

Exhibitions.—Examinations will be held at the end of each session, and prizes awarded for the best answering and attendance in the various subjects taught. There is also a prize for the best series of cases in hospital. In addition, the lecturers on one day in each week examine in the subjects lectured upon.

Fees.—By a recent arrangement all the lectures required for the College of Surgeons and the Apothecaries' Hall, or the College of Physicians, can now be given for sixty-three guineas; this sum includes the fee for attendance on hospital. Fee for Hospital Dressership for the winter six months, 21*l.* Hospital Dressership for the summer six months, 15*l.* 15*s.* This includes the Hospital Certificate for the period.

JERVIS-STREET HOSPITAL, DUBLIN.

Phys., Drs. R. D. Lyons and S. M. Macswiney.—*Surgs.*, Messrs. R. P. O'Reilly, M. H. Stapleton, M.D., A. Banon, M.D., J. S. Hughes, M.D., J. K. Forrest, H. J. Tyrrell, and R. McDonnell.

The number of beds in the hospital is 80.

Fees for Hospital Attendance and Lectures.—Winter session, 6*l.* 6*s.*; nine months, 8*l.* 8*s.*; perpetual pupils, 21*l.*

LYING-IN HOSPITAL, RUTLAND-SQUARE, DUBLIN.

Established 1745. Chartered by George II.

Cons. Phys., C. P. Croker, M.D.—*Cons. Surg.*, R. Adams, M.D.—*Master*, Dr. J. Denham.—*Assts.*, Drs. J. R. Kirkpatrick and J. Cronin.—*Sec. and Regist.*, Mr. J. G. Strickland.

This hospital contains 130 beds, 15 of which are appropriated to the diseases of females. The annual average number of in-patients is 2,000; out, 2,500.

Terms of attendance for Six Months.—Intern pupils, 21*l.*; extern pupils, 10*l.* 10*s.* Fee on diploma, 10*s.* 6*d.*

MEATH HOSPITAL AND COUNTY OF DUBLIN INFIRMARY.

This hospital is situated near the College of Surgeons and the Ledwich School of Medicine. Terms of attendance on the practice may be obtained from Mr. Macnamara, Hon. Sec.

The Medical Clinical Instruction is given by Drs. W. Stokes and A. Hudson.

The Surgical, by Drs. J. Smyly, G. H. Porter, M. H. Collis, J. H. Wharton, P. C. Smyly, and Rawdon Macnamara.

MATER MISERICORDIÆ HOSPITAL, ECCLES-STREET, DUBLIN.

Established 1861.

Phys., Drs. J. Hughes and T. Hayden.—*Surgs.*, Messrs. R. P. O'Reilly, A. Ellis, M. H. Stapleton, and F. R. Cruise.—*Apoth.*, Mr. Moore.—*Hon. Sec.*, Dr. F. R. Cruise.

The portion of this hospital now completed contains 100 beds.

Terms of attendance.—Nine months, 8*l.* 8*s.* ; six winter months, 6*l.* 6*s.*

MERCER'S HOSPITAL, WILLIAM-STREET, DUBLIN.

Cons. Surg., Mr. A. Read. The clinical instruction and lectures will be delivered as usual. *On Medicine*, by Drs. J. Osborne and W. Moore. *On Surgery*, by Messrs. W. Jameson, M.D., P. Bevan, M.D., R. G. H. Butcher, M.D., and E. Ledwich.

The hospital stands in the immediate vicinity of four of the principal Medical Schools, and is recognised by all licensing bodies. Its average number of in-patients is 50 ; out, 150 per diem.

Terms of attendance.—Six months. 6*l.* 6*s.* ; nine months, 8*l.* 8*s.*

QUEEN'S COLLEGE, BELFAST.

FACULTY OF MEDICINE.

Anat. and Physiol., Dr. Redfern ; *Pract. Med.*, Dr. Ferguson ; *Pract. Surg.*, Dr. Gordon ; *Chem.*, Dr. Andrews ; *Mat. Med.*, Dr. J. Seaton Reid ; *Midw.*, Dr. Burden ; *Comp. Anat.*, Dr. Hodges ; *Med. Juris.*, Dr. Ferguson ; *Bot. and Zool.*, Dr. Wyville Thomson.

The Belfast General Hospital contains 120 beds.

QUEEN'S COLLEGE, CORK.

FACULTY OF MEDICINE.

Anat., Physiol., and Pract. Anat., Dr. J. H. Corbett; *Pract. of Med.*, Dr. O'Connor; *Pract. of Surg.*, Dr. Bullen; *Mat. Med.*, Dr. O'Leary; *Midw.*, Dr. Harvey; *Med. Jurisp.*, J. Blyth, M.D., and Mr. M. Barry; *Nat. Philos.*, Mr. J. England; *Chem. and Pract. Chem.*, Dr. Blyth; *Zoology and Bot.*, Mr. J. R. Green; *Mod. Languages*, Prof. R. de Vericour; *Regist.*, Mr. R. J. Kenny; *Treas.*, Mr. Fitzgerald; *Libr.*, Dr. O'Keefe.

Eight Scholarships will be awarded to Students in Medicine, thus:—Six Junior Scholarships of 20*l.* each to students commencing their first, second, and third year, two to each year; and two Senior Scholarships of 40*l.* each to students commencing their fourth year.

The North Infirmary at Cork contains 100, and the South Infirmary contains 110, beds.

QUEEN'S COLLEGE, GALWAY.

FACULTY OF MEDICINE.

Anat. and Physiol., and Pract. Anat., Dr. Cleland; *Pract. of Med.*, Dr. N. Colahan; *Pract. of Surg.*, Dr. J. V. Browne; *Mat. Med. and Med. Jurisp.*, Mr. S. M'Coy; *Midw. and Dis. of Women and Child.*, Dr. R. Doherty; *Chem.*, D. T. H. Rowney; *Nat. Philos.*, A. H. Curtis, A.M.; *Bot. and Zool.*, Dr. A. G. Melville; *Logic and Ment. Philos.*, Dr. T. W. Moffett; *Registrar*, W. Lupton, M.A.

The County of Galway Infirmary, Town, and Union Hospitals, are in the immediate vicinity of the Queen's College. They contain upwards of 200 patients.

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS,

North Brunswick-street, Dublin.

These hospitals contain 312 beds, and have attached to them the Truss Establishment for the relief of the ruptured poor of Ireland. The Richmond Institution for the Insane, accommodating 600 patients, is in the immediate vicinity of the hospitals, and is open to pupils at a moderate fee.

Adjoining these hospitals is the Carmichael, late the Richmond Hospital, School of Medicine, where regular courses of lectures are delivered on the several subjects of Medical Science.

Terms of attendance.—For the winter session of six months, 8*l.* 8*s.*; for the summer session of three months, 3*l.* 3*s.*

ROYAL COLLEGE OF SURGEONS.

WINTER SESSION.

Anatomy and Physiology, Dr. Jacob; *Descriptive Anatomy*, Dr. Bevan, and Mr. Morgan; *Surgery*, Mr. Hargrave and Dr. Hughes; *Practice of Medicine*, Dr. Benson; *Chemistry*, Dr. Barker; *Materia Medica*, Dr. Macnamara; *Midwifery*, Dr. Sawyer; *Medical Jurisprudence*, Dr. Geoghegan; *Practical Chemistry*, Dr. Barker; *Comparative Anatomy*, Dr. Jacob; *Botany*,

Dr. Mitchell. *Dissections* under the direction of the Professors of Anatomy, assisted by the Demonstrators, Messrs. Croly, Stoney, and McAllister.

SUMMER SESSION.

Materia Medica, Dr. Macnamara ; *Medical Jurisprudence*, Dr. Geoghegan ; *Botany*, Dr. A. Mitchell ; *Practical Chemistry*, Dr. Barker.

The fee for each of the above courses is 3*l.* 3*s.*, except *Comparative Anatomy*, which is free.

A *Public Course of Lectures* on Comparative Anatomy and Zoology, free to all students, is delivered by the Professor of Anatomy and Physiology, at the commencement of the session, and additional lectures on the same subject are given at intervals during the winter.

Practical Instruction in Operative Surgery is given by the Professors of Surgery, separate from the Surgical Lectures. Fee, 5*l.* 5*s.*

SCHOOL OF MEDICINE AND SURGERY, TRINITY COLLEGE, DUBLIN.

This school was established by Act of Parliament, 40th George III., and is under the joint government of the Board of Trinity College, and the King and Queen's College of Physicians.

WINTER SESSION.

Institutes of Medicine and Pathology, Prof. Law ; *Materia Medica and Pharmacy*, Prof. Osborne ; *Surgery*, Prof. Smith ; *Anatomy and Physiology*, Prof. McDowel ; *Practical Anatomy*, Drs. Barton and Bennett ; *Chemistry*, Prof. Apjohn ; *Practice of Medicine*, Prof. Banks ; *Midwifery and the Diseases of Women and Children*, Prof. Churchill.

Medical Scholarships and Exhibitions.—Two Scholarships have been founded by the Board of Trinity College, value respectively 20*l.* per annum for two years, and three Exhibitions, two of the value of 15*l.*, and one of 10*l.*, have been founded by the Professors of the School.

Sir Patrick Dun's Hospital is visited at nine o'clock daily by the Clinical Professors, and clinical lectures are delivered twice in each week during the winter session, as also during the months of May, June, and July.

The *Lectures on Botany*, by Dr. Harvey, and on *Medical Jurisprudence*, by Dr. Brady, and the Course of *Practical Chemistry* by Dr. Apjohn, will be delivered during the summer session.

The fee for each course of lectures is 3*l.* 3*s.* ; for each course of clinical lectures, 3*l.* 3*s.* ; for attendance on the practice of Sir P. Dun's Hospital to students in Arts T.C.D. of two years' standing, 3*l.* 3*s.* ; to other students, 10*l.* 10*s.* Certificates from this school are received by all licensing bodies in medicine and surgery.

Sir P. Dun's Hospital contains 100 beds.

ST. VINCENT'S HOSPITAL, STEPHEN'S-GREEN, DUBLIN.

Med. Officers, Mr. J. M. O'Ferral, Dr. F. B. Quinlan, and Dr. E. D. Mapother ; *Apoth. and Regist.*, Mr. D. Dillon ; *Surg.-Dentist*, Mr. W. O'Doherty.

This hospital contains 100 beds.

The certificates of attendance upon the Medical and Surgical Practice, are recognized by all of the Examining Boards.

THE MEDICAL MIRROR.

NOVEMBER, 1864.

ORIGINAL COMMUNICATIONS.

Presidential Address, delivered at the Opening of the Ninety-Second Annual Session of the Medical Society of London.
By ROBERT GREENHALGH, M.D., M.R.C.P., Physician-Accoucheur, and Lecturer on Diseases of Women, at St. Bartholomew's Hospital, President of the Medical Society of London, &c.

GENTLEMEN,

IT is a time-honoured custom that the President of this, the oldest Medical Society in the Metropolis, should deliver at the commencement of the sessional year an Address upon some point or points of interest connected with practical medicine, for the cultivation of which this institution stands pre-eminent.

In pursuance with that usage, I have, after some consideration, determined not to expend the brief period allotted me to any special class of cases, but to condense a large body of facts, illustrative of difficult diagnosis, which have from time to time come under my own observation.

Forewarned—forearmed, is as applicable to medicine as to other circumstances in life; and, if I succeed in aiding you, from the large stores of facts placed at my command, in forming more confident, or guarding against erroneous, diagnoses, my end will be attained. At least, I hope to convince you that, no matter how great our experience, no matter how well versed we may be in any speciality, no matter how careful and anxious we may be in the pursuit of truth, yet that we are not infrequently left in doubt, and are occasionally liable to error. I would further hope, that such considerations will lead us to put a charitable con-

struction on the opinions of others, more especially when emanating from the too frequently overworked general practitioner, that they may guard us against over-weening conceit, while fostering a modest confidence and careful self-reliance; still further may they induce a willingness to admit, and a reluctance to screen, an error on our part when committed. It has been truly said, that the errors of great men are pregnant of facts; and, although laying no claim to be numbered in that enviable category, still, I do fearlessly assert a claim to a degree of confidence at your hands on the score of large experience, carefully stored and truthfully recorded.

The cases which I shall now place before you differ so widely from one another, that I have not attempted any classification; but, where bearing any resemblance, I have placed them side by side, in order to facilitate comment and to prevent tautology. I have also carefully avoided any unnecessary detail, feeling convinced that the end I have in view would be more effectually and pleasantly attained by the, it must be confessed, fragmentary materials which I submit to your kindly consideration. I have still another object in view, which is, to elicit other cases of difficult or erroneous diagnosis, so that, while I endeavour to instruct, I hope to be instructed; feeling, as every conscientious practitioner must feel, that be his opportunities of observation, his diligence, and his intelligence ever so great, yet so varying are the phases of disease, that his life is and must ever be but a studentship.

CASE I.—Vascular tumour of the meatus urinarius, complicated with vesical calculus; removal of both; recovery.

On the 14th of October, 1863, a patient was admitted into Martha Ward under my care; she was 44 years of age, married, and had had a family. About four or five months ago she began to suffer pain during and after micturition which had increased up to the present time; the pain was of a violent, smarting character; she had no discharge, but was quite unable to retain her water, which was always dribbling away. A small vascular tumour was detected at the orifice of the urethra, which was destroyed by the galvanic cautery. Six days after the operation no trace of the tumour could be detected, but as she still complained that she could not retain her water, I passed a sound into the bladder, when I detected a large calculus, which was successfully removed by Mr. Lawrence.

CASE II.—Polypus of the uterus mistaken for carcinoma; spontaneous separation; cure.

During the year 1848 I was requested to visit a lady who

was said to be suffering from cancer of the womb, the existence of which had been affirmed by two eminent obstetric practitioners. The patient was 46 years of age, greatly emaciated, and exhibited the peculiar cachectic aspect of malignant disease. The air of the apartment was somewhat tainted by a peculiar odour. Upon inquiry, I learnt that about seven years ago her menstruation became more profuse, and, after some months, very irregular, and during the last year and a half she was scarcely ever free from a sanious discharge. About that period she was seized with pains like those of labour, which persisted more or less for some weeks, occasioning the expulsion of numerous large and firm coagula. Latterly the pains had been of a darting and stabbing character, since which she had lost less blood. For nearly a year the discharge had been very offensive, of a dirty brown character, commonly mixed with blood. This lady had had several children, the last about $8\frac{1}{2}$ years ago.

On examination, the vagina was found lax, cool and very moist. The upper part was occupied by a large, nodular, mostly firm growth, but here and there the tissue was loose and broke down under the finger. I could nowhere detect the os uteri; I therefore came to the conclusion that the mass consisted of the neck of the uterus in a far advanced state of cancerous degeneration. As I hesitated in giving a decided opinion, chiefly on the ground of the long history of the case, I was desired by the friends of this lady to take time to consider, and to pay another visit in the course of a fortnight. Accordingly I did so; and, while making a careful local examination, the diseased tissue suddenly became loose in the vagina, when I was enabled to pass my finger above the mass, and, to my astonishment, I discovered a nearly healthy os and cervix uteri. I speedily extracted the loose body, which, upon arrival at home, I carefully examined, when it proved to be a polypus about the size of an ordinary apple, in a state of far advanced degeneration (sloughing). The patient slowly regained her former health, maintaining to the hour of her death, which occurred about two years ago, that I had cured her of cancer.

CASE III.—Polypus of the uterus mistaken for cancer: removal; cure.

Not many months ago I was requested by Mr. Bickerton to visit a lady about 42 years of age, who was supposed to be dying of cancer. Her lips and cheeks were blanched by repeated severe losses of blood, continuing over many months, and altogether she was in a most enfeebled state. She suffered much pain, sometimes of a bearing down and expulsive, at others, shooting and stabbing, character. She also had

a copious and most offensive putrilage escaping from the vagina. In spite of treatment she became worse and worse, when my advice was sought.

On examination, the vagina was found fully occupied by a loose, ragged mass, into which the finger passed in every direction. At first the os uteri could not be detected, but after passing the finger close against the walls of the vagina, I at length came upon that part, through which the firm pedicle of a polypus about the size of the thumb was protruding, which could be distinctly traced into the loose tissue above described. The nature of the case being no longer doubtful, the patient was directed to partake freely of good soups, meat-juice, and stimuli, inject cold water and a lotion of Condyl's fluid, and take large doses of the sesquichloride of iron. After a week she had so much improved in health that I proceeded to remove the polypus, which was easily effected by means of my forceps and a pair of curved polypus scissors. From that period this lady made a steady recovery, and was, some months after the operation, in good health.

CASE IV.—Polypus of the uterus, mistaken for epithelioma; removal; recovery.

Some months ago a woman presented herself among the out-patients of St. Bartholomew's Hospital, with a note from her medical attendant, in which he stated he believed her to be suffering from epithelial cancer, but should like to have my opinion as to the form of cancer, never apparently doubting for one moment that such was not the affection. She was about 38 years of age, and had had a family. She stated that for about fourteen months she had been suffering from repeated floodings, alternating with a brownish and very offensive discharge from the vagina. At first she suffered severe paroxysmal pains, closely resembling those of labour, but latterly they had been more "jobbing" and throbbing in character, especially at her menstrual periods, when they were somewhat expulsive, more especially when large "clodders" escaped from the parts. On examination the vagina was normal, the upper part being occupied by a fixed, irregular, nodular growth, which felt, in parts, extremely smooth under the finger. At first I was strongly impressed with the idea that it was a case of cancerous degeneration of the cervix uteri; in fact, I expressed that opinion to the students in attendance. I was induced, however, to make a still more careful examination, when I succeeded in passing my finger beyond the growth, when it came upon the healthy margin of the os uteri, within which I could now distinctly make out the pedicle of a polypus, considerably less in size than my little finger. A sudden twist was sufficient to break through

the pedicle, which, freed from its attachments, I extracted from the vagina with my fingers. The specimen I submit for your inspection.

CASE V.—Foreign body, in the vagina simulating epithelioma of uterus: proposed removal by *écraseur*; detection of healthy uterus.

A year ago a woman, about 60 years of age, mother of several children, was admitted into the hospital, supposed to be suffering from epithelioma of the uterus. She was much emaciated, said she was in great poverty, and evidently sought to excite great commiseration. She stated that for more than a year she had suffered from a brownish watery and offensive discharge from the vagina, accompanied with severe stabbing and excruciating pains about the lower abdomen, back, and “private parts.” She described them as constant, liable to considerable aggravation, and preventing sleep.

The vagina apparently healthy, but very capacious, was occupied at its upper part by a body, elastic to the touch, very uniform, somewhat rough and roundish in shape; when pressed upon, a watery fluid extremely offensive exuded, and she complained that the pressure occasioned the most agonizing pain, so much so, that I could not keep her quiet while I made the examination. She was further examined by two medical friends and my midwifery assistant, who considered it a case of epithelioma of the cervix uteri, all, however, remarking that they never felt such a peculiar growth before. The patient was placed upon good diet, iron was prescribed, and a lotion of Condyl’s fluid was daily injected, and it was arranged, within her hearing, that the cervix should be removed by the *écraseur*, under chloroform, in a few days.

Accordingly, in the course of five days, while going my round in the ward, I came to this patient, upon whom I was about to operate. She begged me to defer any operative measures, saying “she was sure my medicine would cure her without, as she felt so much better already.” I again examined her, when, to my great astonishment, I found a perfectly healthy vagina, os, and cervix uteri. I was now for the first time aware that she had practised deception, the nature of which I endeavoured to discover through the aid of the sister, but without success. Placing a piece of sponge in a similar position, I am disposed to think that the body consisted of that material.

CASE VI.—Ovarian tumour mistaken for extra-uterine and subsequently normal pregnancy: extirpation; recovery.

Somewhat less than three years ago, a patient, 38 years

of age, married, without family, was admitted under my care into St. Bartholomew's Hospital. She stated that about eight months ago her menstruation, which had been previously regular, now returned every fortnight, and that she experienced severe crampy pains in the lower part of the abdomen. About five months ago she noticed her abdomen gradually increasing in size, which she says commenced and has continued to increase in the centre and lower parts up to the present time.

Examination detected a firm, round, and unfluctuating tumour, extending from the pubes to three inches above the umbilicus, nearly in the central line. The sound passed two and a half inches in the normal direction. I considered the case to be ovarian. She was subsequently seen by Mr. Spencer Wells, who was of opinion that the enlargement was due to an extra-uterine pregnancy, and by a well-known obstetric physician, who considered it a case of normal pregnancy. About four months afterwards she was admitted into the Samaritan Hospital, under Dr. Savage, who, with Dr. Routh, and M. Nelaton, confirmed my diagnosis; at the same time stating that it had many of the characters of a large fibroid. The tumour went on increasing until it became so large, and occasioned the patient so much inconvenience, that Mr. Wells deemed it a fit and proper case for an "exploratory" incision, when all doubt about the nature of the case was set at rest. But slight difficulty was experienced in the removal of a large polycystic ovarian tumour, with a considerable amount of solid tissue. The patient made an excellent recovery.

CASE VII.—Ovarian dropsy, simulating ascites; death.

In the autumn of the year 1862 a patient was admitted into the hospital with great enlargement of the abdomen. I first saw this poor woman somewhat hurriedly on my return from the Continent, when I found her belly very prominent and uniformly distended; it was perfectly resonant in front, and partially so in each flank. My assistant, upon my drawing his attention to the physical signs, as being rather indicative of ascites than ovarian dropsy, stated that she had been three times tapped in St. Thomas's Hospital for ovarian dropsy; that when admitted her abdomen was perfectly dull, and fluctuation could be detected; that the tumour commenced in the right side, and that she had never had renal, hepatic, cardiac, or pulmonary disease. I saw this patient two days afterwards, when I was informed of the following facts: that shortly after her admission she took a strong dose of house medicine, which brought away from the bowels several pints of an offensive yellowish fluid, after which the abdomen became almost flat, but speedily distended again.

Upon shaking the body from side to side a singularly marked splashing sound was audibly detected by the unaided ear, and through the stethoscope; when lying on the right side, the left gave out a clear sound on percussion, and when on the left, the right a somewhat duller. There was no disease of the uterus, liver, lungs, or kidneys.

Her health, much impaired, became daily worse; and after about a month she expired, with all the symptoms of blood poisoning.

Post-mortem.—Upon opening the abdomen a large ovarian cyst, adherent to every part of the abdominal walls, was brought into view, containing about one and a half pints of yellowish, watery, very offensive fluid, and having a large mass of semi-solid growths on its right side. A further examination detected a very small opening between the cæcum and tumour, through which water or air could be injected. No other organs were found affected. This case is the only one of the kind which I have met with in practice, about the nature of which, I confess, I was taken off my guard, and was led to express an erroneous opinion.

CASE VIII.—Fibroid of the uterus, combined with pelvic abscess, simulating retroversion of the uterus.

Early in this year a married woman, about 38 years of age, who had had a family, was admitted into the hospital under my care. She stated that for some months past she had menstruated profusely, and more frequently than formerly; that she had suffered, more or less constantly with pains of a somewhat bearing down character in and about the hips, back, and abdomen. Throughout life she had been subject to leucorrhœa. Her general health, with the exception of slight debility, was good.

Examination detected some irregular enlargement, firm and slightly tender in the left iliac fossa, which was relatively, not absolutely dull on percussion.

The vagina was short anteriorly, and considerably rugated, long posteriorly, and with but slight trace of rugæ. The cervix uteri considerably shortened and firm, was high up behind the pubes; the os uteri slightly patulous and transverse; posterior to which was a firm, roundish, and somewhat tender swelling, nodular, and in one part soft to the touch; it occupied the upper part of the sacral cavity, in which it was fixed; the sound somewhat bent, passed about four and a half inches nearly in the normal direction. Coupling the general with the local symptoms, as well as the history of the case, I had no doubt it was a case of fibroid of the uterus. At my next visit, three days afterwards, my midwifery-assistant informed me that the day after my

examination she was seized with total retention of urine, for which he had to pass the catheter, occasioned, as was supposed, by the uterus becoming suddenly retroverted. A somewhat hurried examination seemed to confirm that diagnosis. Two days afterwards I was induced to make a more careful examination, when I ascertained by the sound that the uterus was not retroverted. In the meantime the swelling posterior to the uterus had become softer and softer, which, after a few days, burst per vaginam, giving exit to about half a pint of very offensive pus, followed by gradual descent, day by day, of the uterus, which eventually regained nearly its normal position. Later some nodular growths could be clearly made out, more or less connected with the enlarged uterus, which were clearly fibrous out-growths.

CASE IX.—Tumour of the abdomen, leading to the suspicion of pregnancy; distended bladder; introduction of catheter; cure.

About two years ago I was requested by my colleague, Mr. Lawrence, to visit a patient in Bethlehem Hospital. She was about 35 years of age—single. She had been admitted into that institution three or four times, imagining herself to be pregnant, which delusion originated in a disappointment of marriage—blighted love. On this occasion she was noticed to be much enlarged about the abdomen, and as she persisted that she should be confined shortly, my opinion was sought.

On examination a swelling was detected, somewhat directed to the right side and extending from the pubes to about two inches above the umbilicus, which was prominent. It was pyriform in shape, very firm, dull on percussion, no fluctuation, no foetal limbs nor movements could be felt, no foetal heart or bruit could be heard. Dr. Routh was fully impressed with myself, at this stage of the investigation, that the tumour would turn out to be a large fibroid. From her peculiar mental state it was obvious that no reliance could be placed on any statement she made. Examination continued. The vagina was small—rugæ well developed—at its upper part the tapering neck of the uterus could be felt—firm in texture—moveable, and directed somewhat forwards—the os round and small—no impulse occasioned by pressure on the abdominal swelling—anterior to the neck of the uterus an elastic swelling could be felt, as if containing fluid. Up to this period we were by no means clear about the nature of the case. In order, therefore, to remove all doubt, a catheter was passed into the bladder, when a chamber-pot and a half full of urine was drawn off, after which the abdominal swelling was ascertained to have wholly disappeared.

I may here remark, that I have seen and carefully examined many cases of over-distended bladder, but I never felt one so firm as the one at present under consideration; so firm, in fact, as closely to resemble a fibroid in texture.

CASE X. — Pregnancy, complicated with an ovarian tumour, supposed to be the latter affection with retroversion of the uterus; puncture of membranes; safe delivery.

On the 31st of October, 1857, I saw the following case with Mr. Pritchett. Mrs. C., æt. 26, married about 10 months, had ceased to menstruate 7 months—had been sick in the morning—the breasts exhibited the usual appearances of pregnancy, and the abdomen had steadily increased in size, and she fancied she had felt foetal movements. My opinion was sought on account of the enormous distention of the abdomen, which was, together with the pelvis, occupied by a large, fluctuating swelling. Ten days previous to my visit she had been seen by an accoucheur of some eminence, who had given his opinion that she was not pregnant, but was the subject of ovarian disease and retroversion of the uterus.

At the time of my visit I could distinctly make out two swellings in the abdomen, one in the left side, pyriform in shape, about the size of a six-months' uterus, firm, hardening under pressure, and evidently rising up under the abdominal parietes; the other on the right side large, round, uniform, distinctly fluctuating, extending upwards to the ribs, and lost in the pelvis. Per vaginam, the os uteri was high up behind the pubes, firm in texture, tapering, the os round and small. Posteriorly the cavity of the sacrum was filled up by a firm, unfluctuating swelling tender to the touch. The umbilicus was somewhat retracted in a sulcus which existed between the two lateral enlargements.

Having no doubt about her pregnancy, and as there were every now and then recurring pains, I had no hesitation in recommending the membranes to be punctured, with a view of relieving the distension under which the patient was suffering severely. A considerable quantity of liquor amnii escaped, followed in some hours by an increase in the severity of the pains, when the hand and arm of a foetus were forced through the os uteri. Subsequently she was placed under chloroform, the hand was passed into the vagina, the tumour was raised, and finally the feet of the foetus were seized, and the labour terminated. The patient recovered.

CASE XI.—Extra uterine pregnancy mistaken for pelvic cellulitis and ovarian tumours; gastrotomy; extraction of living foetus; death.

I was requested by Mr. Clifton to visit a lady, about the nature of whose case various opinions had been expressed.

She was 40 years of age, had been married six years, and had had a child about five years ago. On the 16th of August she ceased to menstruate, followed in about six weeks by morning sickness and swelling of the breasts. About the beginning of November she noticed an enlargement in the right iliac fossa, which steadily increased in size. About the end of October she was seized with paroxysmal pains about the lower part of the back and abdomen, which were followed by a sanious discharge and the expulsion of a membranous substance, like decidua. Mr. Clifton being somewhat doubtful about the nature of the case, sought the opinion of a highly-skilled general physician, who considered the enlargement to be ovarian. About the middle of November another consultation was held with an eminent accoucheur, who expressed a decided opinion against its being ovarian, and was convinced it was a pelvic abscess. About the middle of February she began to suffer so severely from abdominal pains, and was losing flesh so rapidly, that my opinion was sought.

In justice to Mr. Clifton, I may state, that before I entered upon the particulars of her case, he expressed a decided opinion that his patient was suffering from extra uterine foetation. Upon inquiry I found that, in addition to the cessation of menstruation, morning sickness, enlargement of the abdomen and breasts, with a well-marked areola, she had felt movements resembling those of a foetus.

On examination I could distinctly detect abdominal ballottement, and I thought I could make out something like foetal limbs—no placental bruit or foetal heart could be heard. Per vaginam, the uterus thrown to the left of the pelvis was high up, enlarged and soft, the os being somewhat patulous. On the 14th of April I again saw this lady in consultation, when Mr. Clifton and I were more convinced than ever that she was pregnant and nearly eight months advanced. She was now suffering from almost constant vomiting and severe colicky pains in the abdomen—she was jaundiced, the limbs were very oedematous, and she was emaciated to the last degree. It was evident something must now be done to remove the enlargement or she would die shortly; consequently gastro-tomy was proposed and was readily assented to by the patient and her friends. It was decided, however, to secure the opinion of a leading accoucheur, as well as his counsel during the operation; so ill-defined, however, were the local symptoms that he positively declined to express a decided opinion as to the existence of pregnancy. He considered, notwithstanding, that such was the condition of the patient that an exploratory operation should be undertaken, and if a

foetus presented it should be extracted if possible. Accordingly, on the 21st of April, I performed gastrotomy, extracting a living male foetus, which lived but a few minutes, the mother dying in about thirty-two hours. How, you may ask, was it that the diagnosis was so difficult? In part, owing to the abdomen of the child being protruded against the parietes of the mother's abdomen, the limbs, head, and chest being doubled backwards against the spine, thus no limbs could be traced, and the heart of the foetus was too remote for its sounds to be heard.

The history of the case, coupled with the abdominal and vaginal examination were sufficiently conclusive to my and Mr. Clifton's minds to lead us to speak positively as to the nature of the case.

I could have narrated many other cases had time permitted; I cannot, however, conclude without alluding very briefly to some few other anomalous cases.

A woman suffering from well-marked lupus of the vulva, presented herself with the cervix and os uteri protruding through the anus, a large opening existing between the vagina and rectum.

My opinion was sought in two cases in which, after difficult extraction of the placenta, bodies closely resembling intestines, which they were supposed to be, were found occupying the anterior wall of the vagina, one being an hypertrophy of the anterior lip of the uterus and portion of the vaginal wall, the other being due to the latter structure only. Again, I have been asked to see cases of supposed procidentia, or prolapsus uteri, which have turned out to be neither more nor less than cases of vesico or recto-vaginocele, and on more than one occasion I have had patients sent to me supposed to be labouring under abdominal tumours, which have proved to be distended bladders, or of a combination of fat abdominal parietes, distended large intestines, with, in more than one case, distended bladders.

Again, I have seen a case of ovarian disease complicated with ascites, in which the adhesions above and the pedicle beneath permitted such free movement of the growth during respiration, as to closely resemble, nay more, to be taken for by myself and an experienced ovariologist, extra uterine pregnancy with foetal movements.

I have known an inverted uterus removed by the *écraseur* by an experienced and intelligent gynecologist under the supposition that it was a polypus.

I have seen a specimen of a large hypertrophy of the uterus removed under the idea that it was an enlarged ovary, and that by an experienced ovariologist.

Over and over again I have met with cases of hypertrophy and élongement of the cervix uteri mistaken for and treated as procidentia uteri. And I well remember a case of enormous hypertrophy and élongement of the cervix uteri supposed to be an ovarian tumour with procidentia of the uterus.

It might be asked, could not these errors, in many of the cases, have been avoided? I must confess that I think they could.

1stly. Had the practitioner been aware of, or had he met with similar cases before; or,

2ndly. Had he formed no preconceived opinion as to the nature of any one of the cases until he had thoroughly investigated the conditions of the organ or organs implicated; for example, where polypi have been mistaken for cancerous growths, élongement of the uterine neck for prolapsus, vesico or recto-vaginocele for procidentia uteri, had the state of the vaginal walls or the length of the vagina been carefully traced to its upper part, no such mistake could have been made; then, again, the sound at once served to distinguish the enormous hypertrophy of the uterus, which was supposed to be an enlarged ovarium; and numerous other sources of fallacy could be specially pointed out, were they not clearly indicated by the cases detailed.

Suffice it, however, to say, that these errors have occurred in the hands of experienced practitioners, and are pregnant of facts; and that, in all probability, had they been forewarned by either the recital or occurrence of a similar case or cases, in their own practice, they would have been forearmed, and would not only have avoided erroneous, but have formed correct, diagnoses.

An Address, introductory to a Course of Clinical Lectures on Diseases of the Skin. Delivered by ERASMUS WILSON, F.R.S., F.R.C.S.

AFTER reminding his hearers that the object of their assembling together was for the purpose of inaugurating a new institution, a second Hospital for Diseases of the Skin, with a view to the development of a system of "Clinical Teaching of Cutaneous Medicine," which has been neglected in this country, Mr. Wilson passed a warm eulogium on his colleagues for the share which they had taken in promoting an institution of this nature. He then described the great diffi-

culties which they had encountered at the outset of their undertaking, through the prejudice of some, and the apathy of the others.

Proceeding in his address, he pointed out that the study of cutaneous medicine consists of two parts, a theoretical and a practical part; the former requiring of the student a knowledge of the skin in a healthy, and in a diseased, state, which may be obtained through the help of anatomy and physiology, and pathology; the latter, the practical portion, which can only be learnt by the bedside, with the aid of observation and experience, and which is necessary to enable the student "to identify and distinguish disease; to ascertain its nature and phenomena; to search for its cause; and upon these data, to determine the principle of treatment and the means of cure." It is this which constitutes the clinical education of the student.

"Assuming that the student is acquainted with the distinguishing characters of the skin in a state of health, he is already in a position to note the appearances which indicate a departure from the healthy standard. It may be that the skin is *redder* than natural; it may be roughened by the presence of small *pimples*; or it may be that the roughness proceeds from small *vesicles*, or even from *bladders* containing a serous fluid; or the vesicles may be filled with pus, and so constitute *pustules*; or it may be that a *scale* of altered cuticle is the pathological sign; or a larger prominence termed a *tubercle*; or, again, a discoloured blotch or *stain*. Here, then, we have a series, a kind of chain, of altered appearances of the skin which indicate an abnormal state, in other words, a state of disease. These, therefore, are *pathological* signs or appearances; they have a consecutive relation to each other; and they form a kind of alphabet or lexicon by which differences in the characters of the disease may be noted or distinguished. Let us look at them again; they are eight in number: 1. Redness; 2. Papulation; 3. Vesiculation; 4. Bladders, technically called *Bullæ*; 5. Pustulation; 6. Squamation; 7. Tuberculation; and 8. Maculation. It was upon these simple pathological characters, constituting, as it were, the physiognomy of disease, that Pleuck, and after Pleuck, Willan, founded his classification of cutaneous diseases. Upon these simple data were established the eight orders of the Willanean system, namely, Exanthemata; Papulæ; Vesiculæ; Bullæ; Pustulæ; Squamæ; Tubercula; and Maculæ. It is a classification that arises naturally out of the pathological signs; and it comprehends in one simple category, all the leading pathological signs that are known. It is essentially a theoretical classification; and it is especially a classification

adapted for the student, or an *educational classification*. It is to cutaneous science what the Linnæan classification of plants is to Botany; and so it must ever remain."

But, however suitable this classification may be for learners, Mr. Wilson observed that a different arrangement is requisite in practice; such as shall enable the practitioner to treat disease with the greatest success. To illustrate his meaning, the lecturer stated that he had lately collected together one thousand cases of affections of the skin, which were registered just as they came to hand, and without selection. "In these thousand cases I found *fifty-one* different diseases; but, as several of these diseases resembled each other in general characters, and possessed certain mutual affinities, I was enabled, by arranging them in groups, to reduce the number of heads to twenty-two. I thus formed a classification which may be termed a *clinical classification*, as being deduced from a number of actual cases of disease, such as they exist among us at the present time, and such as they offer themselves to us for treatment daily. Let me detail my method of proceeding. There was one disease which in the thousand cases presented itself 298 times; that disease was Eczema. Now, eczema is not only the most common, but it is also the most characteristic, of cutaneous diseases; it is the type of disease of the skin, and, for many reasons, it is the disease which should most awaken our interest and stimulate our inquiry. In the thousand cases in question, there were five other diseases, so nearly allied to eczema, as to deserve to be considered as belonging to the same family or group. Hence, I selected, as my first and leading group, and, at the same time, the most numerous, numbering in all 526 examples, the group of *Eczematous affections*. After eczematous affections I placed three groups, which, like eczema, offered the character of a general affection of the tissues of the skin. These were: *Erythematous affections*, *Bullous affections*, and *Furuncular affections*. Next came three groups representing: *Nervous affections*, *Vascular affections*, and *Hæmic* or *Hæmodyscrasic affections*. Then followed two groups involving development, nutrition, and growth, namely: *Developmental* and *nutritive affections*, and *Hypertrophic* and *atrophic affections*. After these came five groups of specific diseases, for example: *Alphous affections*; *Strumous affections*; *Suppiliptic affections*; *Carcinomatous affections*; and *Leprous affections*. And these were succeeded by the five remaining groups, composed of diseases of the special system of organs of the skin, namely: Affections of the *hair* and *hair-follicles*; affections of the *Sebiparous apparatus*; affections of the *Chromatogenous apparatus*; affections of the *Sudoriparous appa-*

ratus; and, affections of the *nails*. Two groups alone were unrepresented in these thousand cases, namely: *Zymotic affections*, and *Traumatic affections*; the former of these I would make the first of the specific groups, placing it after the diseases of nutrition, and immediately before the five groups of specific diseases commencing with *Alphos*; the latter may very conveniently follow at the end. There is one other group which has been much insisted on of late by the Dermo-pathologists of France, and by some of ourselves, namely: *Phytodermic affections*; which may be added to our list as a twenty-second group; inasmuch as it offers characters of considerable peculiarity and interest. According to the generally received views these disorders originate in a plant foreign to the animal body, but establishing within it a nidus, and a place of development and growth; propagating itself by seeds, and spreading from person to person by the diffusion of its sporules or seeds. According to my opinion, this phytiform growth is a degeneration of the normal structure of the Epidermis, a declension from a higher to a lower sphere of life, from an animal to a vegetable form; exhausting itself in the individual, and not transmissible either by its sporules, or by its substance."

The lecturer next commented upon the nomenclature of cutaneous diseases, and explained how its complexity had been increased by the fact that different ancient nations, from which we derive the greater part of our scientific nomenclature, called the same disease by various names; thus, there is good reason for the belief that what we now term *Eczema* was the *Psora* of the Greeks, and the *Scabies* of the Romans. Mr. Wilson remarked that the descriptions of cutaneous diseases handed down by Celsus are peculiarly interesting. Among them is a definition of a squamous affection termed *Alphos*, which the lecturer considers as identical with the *Lepra vulgaris* of Willan; and, as this term is more suitable than either *lepra* or *psoriasis*, which are entirely different diseases, he proposed its restoration.

From this point he passed on to the etiology of cutaneous affections. "The primary causes of cutaneous disease are only two in number; namely, *debility* and *specific poison*. To the latter belong the group of *Zymotic*, and the group of *Syphilitic* affections; to the former the whole of the remaining groups. Debility may present itself as a lowered vitality of the general system, a constitutional debility; or a lowered vitality of the tissues, local debility; these may exist independently, or they may be combined. In our recent inquiry into the causes of *eczema*, we were impressed with the conviction that debility may present itself in several forms; that

it may be a debility of nutritive power, *nutritive debility*; a debility of the nervous power, *nervous debility*; a debility of assimilative power, *assimilative debility*; or a debility of certain parts or tissues, *local debility*. Debility, in these instances, stands in the position of a *predisposing cause*; but there are causes which precede this common predisposing cause, and which are called *remote predisposing causes*: and causes which follow the common predisposing cause, and which are called *exciting causes*. Moreover, there is the cause which operates with and governs directly the disease itself, namely, the *proximate cause*.

The *remote predisposing causes* are numerous and important, and all the more important, because they are the distant beginnings of a state that is eventually to resolve itself into debility and disease; they are, as it were, the clouds that are the forerunners of the storm, but unlike the latter; when they are known and recognised they admit of being prevented and their consequences frustrated. Arranged in physiological order, these causes may be stated as follows:—Hereditary diathesis; Strumous diathesis; Weakly parentage; Vaccination; Dentition; Eruptive and malarious fevers; Errors of diet; Errors of air, exercise, and clothing; Vicissitudes of cold, heat, and moisture; Ungenial climate; Transition of seasons; Excessive or rapid growth; Sexual excess; Deranged digestion; Deranged menstruation; Uterine, reproductive, and puerperal derangements; Overstrained mental and physical labour; Anxiety, fatigue, and affliction; Nervous shock and fright; Gouty and rheumatic diathesis; Constitutional and organic diseases; General cachexia; and Hæmorrhage.

The remote predisposing causes of local debility are, if possible, more striking and suggestive than those of constitutional debility; for in twenty-two instances, the following nine causes were discovered, namely:—cold, heat, moisture with cold, moisture with heat, errors of clothing and bedding, friction, local irritants, and varicose veins.

The *treatment* of diseases of the skin suggests the question, are we to consider them as local affections merely, or as local and constitutional affections? There cannot be a doubt that they are *both* constitutional and local; and as a consequence, our treatment must partake of the double character of constitutional and local. To comprehend the kind of constitutional treatment necessary for their cure, we must look back upon our observations with reference to their cause.

Some arise from a zymotic poison, and have a regular course, that must be watched with the view to help nature to fulfil her purposes; repose, tranquillity, a recumbent posture;

a suitable diet; the fulfilment of simple indications as they arise; this is all we should attempt. To interfere rashly would be to thwart nature; to thwart nature would be to endanger life.

Some, as the syphilitic affections, originate in a poison that must be eliminated from the blood; that cannot be eliminated too soon; that may be eliminated at every stage of the disease, and without any fear, as in the previous instance, of interrupting the natural process of a poisonous ferment.

Some, again, and the large majority, are diseases of debility, and demand at our hands a conservative and tonic treatment. But in the treatment of this class we must also be influenced by the nature of the cause. In those that proceed from nutritive debility, the organs of assimilation, of digestion and secretion, will require to be regulated before the tonic treatment is commenced, or, at least, in conjunction with the tonic treatment.

The *local treatment*, not less than the constitutional, must also be conducted according to the most advanced principles of surgical medicine. Rest, support, the removal of irritants, the soothing of inflammation when too active, the stimulation of inflammation when irritable or chronic. To treat the constitutional affection, the practitioner must be an enlightened physician; to treat the local disease, he must be an accomplished surgeon.

We would also ask you when a cutaneous disease comes before you for treatment to try to forget that you have to do with a disease of the skin. Examine your patient with reference to his general health; feel his pulse, that you may know the condition of his circulating system; note his features and his manner, that you may appreciate the state of his nervous system; look at the complexion of his skin, of his eye, of his lips, that you may judge of his hæmic and assimilative power; inspect the tongue as the index of the state of the stomach and alimentary canal; inquire as to the appetite and secretions; ascertain if there be any other disorder present in the economy; and prescribe as though it were the general health that you meant to handle and intended to regulate and restore. *Then*, when you have accomplished this; when every indication of general disturbance of health has been carefully considered, and as carefully provided with its appropriate remedy, then is the time to turn your attention to the diseases of the skin, the cutaneous ailment, and legislate upon it.

There are two other features in the history of cutaneous diseases that deserve from us a passing notice, namely: their chronicity and their irritability. They are *chronic*,

because they depend on a lowered vitality of the system, a condition not easily removed or restored; they are chronic, also, because they occupy the limits of vitalization at the surface of the body; and they are chronic because they are local in their manifestation and because the seat of their development exposes them to the continual action of irritants. But if we take the trouble to institute a comparison, we shall possibly find that they are not more chronic than other chronic disorders, especially those of the mucous membrane. What, for example, can be more lasting than a chronic dyspepsia, a chronic bronchitis, a chronic diarrhæa or dysentery, or those special diseases of lowered vitality and mal-assimilation, rheumatism and gout?

The *irritability* of cutaneous diseases is shown in their frequent exacerbations, their tendency to recur, and their active sympathy with distant and often slight disturbance of the organization. The Eczema which is passive to-day, may be exuding discharges, as from a fountain, to-morrow; and may be gone without a trace in less than a week. How shall we explain this amazing irritability of tissue? Shall we say that it is a law of tissue in disease to assume this irritable character, and that nothing will permanently check it but a *restoration to health*? Or we might appeal to the mutual reaction which naturally ensues between an organization in a state of reduced vitality, and tissues in a similar state; an organization morbidly excitable, and tissues presenting an equal degree of excitability, and equally prone to fall into the condition of irritability.

And what are our remedies? We shall want mild aperients; we shall want alteratives; and we shall want tonics. The aperients, the best suited to our purpose, will be such as improve the secretions generally; for example:—sulphate of magnesia; and with the sulphate of magnesia we may combine sulphate of quinine, or a simple bitter infusion. The same remedies will serve the purpose of alteratives. And, for tonics, we may require quinine, cinchona, iron, or bismuth. Our aim is to regulate the secretions, to promote appetite, and to restore power.

When all has been accomplished that these remedies are capable of effecting, we have another remedy in reserve; a remedy that surpasses all others in potency for good and harmlessness of application,—we mean *arsenic*.” After dwelling upon the remedial value of arsenic, Mr. Wilson urged judgment in its administration. “Never prescribe arsenic until you have made ordinary tonics do their duty. Never prescribe arsenic in large doses; begin with doses of one minim; of two minims of Fowler’s solution; and advance

beyond that dose with the extremest caution; remember that five minims administered three times in the day is a maximum dose. Arsenic should always be administered in a small bulk of vehicle, on a full stomach, or, better, in the middle of a meal, with the three meals of the day. And upon the mere suspicion of being the cause of an unpleasant symptom, it should be instantly discontinued.

There is one disease, namely, alphas, in which arsenic is the only known remedy. In this disease there is no disorder of the general health, and the medicine may be commenced without previous preparation of the patient. Unless you know the patient's capability of bearing arsenic already, we advise you in this, a specific case, to begin with three minims for a dose; and increase, in two or three weeks, to four minims; and after another similar interval to five minims. But the dose of five minims must on no account be exceeded.

Arsenic enjoys the credit of being a specific remedy in certain diseases of the skin; and it must be acknowledged that this credit is not undeserved. To us, it seems to be a neuro-tonic, acting especially on the peripheral cutaneous nerves; increasing the energy of circulation through the capillaries, and improving the nutrition of the skin. If a lingering doubt as to its safety as a medicine be entertained, we would refer the doubter to the report of Dr. Robertson on the arsenical waters of Whitbeck; and we would strongly caution the student against the blundering statements that have been made in popular treatises on the arsenic-eating habits of Lower Austria.

Another of the so-called specific remedies in cutaneous medicine is *sulphur*; and in scabies, sulphur deserves all the credit that has been awarded to it. Sulphur destroys the *Acarus scabiei* more quickly and completely than any other known substance; hence our practice of administering it both internally and externally in scabies, and its unfailing success.

The *local* or *topical remedies* employed in the treatment of cutaneous diseases, are chiefly the oxide of zinc in ointment, mercurial ointments and lotions; hydrocyanic acid in lotion; sulphur in ointment and soap; and tar, especially the pyroligneous oil of juniper, the "huile de cade" of the French, in lotion, liniment, ointment, and soap.

To these remedies we must not fail to add cleanliness; a nice adjustment of dressings; support and moderate pressure by means of bandages. The axiom of the 'lady's hand' in the surgical manipulation of diseases of the skin cannot be too strongly urged and enforced."

Essays and Reviews on Affections of the Nervous System, including their Pathology and Treatment. By WILLIAM CAMPS, M.D., Member of the Royal College of Physicians, London, &c., &c.

PRACTICE WITH SCIENCE.

No. 1.—*On Hysteria, and the Hysterical Constitution and Temperament.*

(Continued from page 521.)

I WILL not, on the present occasion, trouble the readers of the "Medical Mirror" by bringing under their notice the ordinary and, therefore, well known symptoms of the more common forms of hysteria; these are to be found, at considerable length, and sometimes described in graphic detail, in most of our recognised works on systematic medicine, and that treat of the general principles of medicine as well as of the practice of physic. My object rather, will be, in the present communication, to give the leading features, the more prominent outlines of a case of this disease of more than common severity, that has been under my own care; and, in fact, is one of those two cases to which I but briefly referred in my last communication to the "Medical Mirror," *vide* September number of the Journal.

The patient in this instance was an intelligent lady, unmarried, rather over than under fifty years of age, consequently, at a period of life when the natural periodical evacuation peculiar to the female ordinarily ceases; her constitution or temperament was more than commonly nervous or hysterical; and, as might, under these circumstances, be readily supposed, she came, in the first instance, under my notice, presenting many of the more common characters of hysteria; yet, as the disease gradually became developed, the case presented, in addition thereto, many of the characters or symptoms of those severe and aggravated forms of the disease to which I have already drawn attention. In addition to the ordinary characters of hysteria, there were, not unfrequently, paroxysms of *perverted, involuntary* movements of various parts of the body, chiefly, however, confined to the trunk; and, at first, almost restricted to the left side of the trunk, yet occasionally affecting both lower extremities; these *perverted* movements by degrees extended upwards, so as at last to affect, although in a slighter measure, both upper extremities, attended concurrently with occasional palpitations of the heart, and heavy, laborious respiration. Subsequently, the patient displayed an excessive general restlessness of the body, so that, when not

lying down on her couch, or when not in bed, she was almost incessantly in bodily motion or action of some one kind or another; seldom, or but very rarely, if ever, sitting down, and sometimes, not even when taking her meals; she would very frequently be in bodily motion of some description even whilst standing, and still more frequently, she would walk hurriedly about from room to room, or in or around the garden, or in other places adjacent to the house in which she resided.

This undue, excessive restlessness of the body, not unfrequently assumed the form of what, is not inaptly, termed fidgetiness, indicated by all sorts of low, vulgar actions, such as biting the finger nails, picking the nose, scratching the head, and pulling out the hairs of the head one by one. To such an extent were these practises indulged in, that the finger nails were bitten almost as low down as to the lunula itself, and by almost incessant scratching of the scalp of the head, it was rendered in some places quite sore and even raw and bloody. This excessive restlessness of the body generally was followed by and accompanied with an equally excessive motion of the muscles of the tongue, engaged in talking, so that there was a corresponding excessive talkativeness, so much so, as to be exceedingly fatiguing to her usual companions. When remonstrated with, and requested to be silent,—“to hold her tongue”—her reply was, “I cannot, I must talk, for I cannot help it.” The most ordinary subject of this talkativeness, or conversation, was almost without exception, herself, and her own peculiar ailment, and bodily and mental condition; and this incessant talking about herself and her condition ultimately assumed a form of the most intense selfishness or egotism that I have ever at any time witnessed. This form of egotism or of intense selfishness was frequently expressed after this manner, as thus; “I seem to want everybody and everything, and I seem to want these always; I am not willing that anything whatever should be done until I am better than I am just now.”

At the commencement of the attack there was no perceptible impairment or derangement of the special senses, nor of the general cuticular sensation; the sight, hearing, touch, taste, and smell were then severally unimpaired. As the disease progressed, however, the organs of sight, of hearing, and of touch became more or less impaired in their functions, and their respective sensations became consequently more or less *impaired* or *perverted*; for, at times, the patient would complain that objects seen did not make their proper healthy impression upon the eyes; that at times she

could not see so as to read distinctly; and at times she would complain of deafness, sometimes of one ear, sometimes of the other, and sometimes, though not so frequently, of both ears at once; and moreover, her sense of touch of minute articles, as pins and needles, and other articles in common use with ladies, was at times *impaired*, and inefficient, for general purposes of usefulness or amusement.

I now proceed to show in what manner the several nerves, with their appropriate muscular apparatus, concerned in the production of voice, and of articulate speech, were, in this patient, morbidly affected.

Anatomy teaches us, that the special nerves herein concerned are derived, for the most part, from the eighth pairs of cerebral nerves, consisting of the glosso-pharyngeal branch and of the superior and inferior or recurrent laryngeal branches of this same eighth pair of cerebral nerves; together with branches or filaments derived from the ninth pairs of cerebral nerves, the so-called lingual, or hypo-glossal nerves.

This morbid, *perverted* action of these various nerves, and of their appropriate muscles, was indicated by the occasional and, therefore, spasmodic, yet unusual tone of voice when speaking. I, more than once, observed the tone of voice to resemble somewhat that of some kind of household dog; not unfrequently the voice was pitched in an altogether unnaturally high, shrill key, and very commonly disagreeably loud in its tone, accompanied with very rapid utterance of words; and all this, too, even in spite of or in opposition to all well-meaning, friendly remonstrance to talk or speak more slowly and quietly, or, in other words, not to vociferate so loudly.

In this particular case, and I have, moreover, in the course of my practice, in private life, witnessed some others of a somewhat similar description; the patient from time to time exhibited morbid phenomena, denoting a diseased or disordered condition of nearly all, if not of all, the nerves of the body; for there was at times a *perverted*, rather than an *impaired*, action of the *motor* nerves, which extend from the upper portions of the cerebro-spinal axis downwards to the termination of the cerebro-spinal axis; or, to take the case in the opposite direction, as it first came under my care, and as it suits my own purpose better to describe it, there was at times, a *perverted* action of the muscles supplied by their appropriate nervous stimulus, whatever may be the precise nature of this appropriate nervous stimulus, influence, or agency; there was, I repeat, from time to time, a *perverted* action of the muscles supplied by their appropriate nerves, extending upwards from the *sacral* termination to the *cerebral* termination of the cerebro-spinal axis. Not only

so, but even more than this, I am of opinion that there is abundant evidence now before me to warrant me in coming to the conclusion that, in this patient, not only were the nerves, and nervous masses, plexuses and ganglia, which, taken together, make up or constitute the cerebro-spinal system of nerves, morbidly affected in this patient; but that, to a very considerable extent, the nerves, and nervous masses, plexuses and ganglia, which, taken together, make up or constitute the sympathetic system of nerves, were more or less also morbidly affected.

From the gradually progressive supervention of the perverted muscular movements, choreic movements, as I have elsewhere termed them, of the trunk and face, it is evident that the sacral, lumbar, dorsal, cervical, and cerebral *motor* nerves were more or less morbidly affected in this patient. The frequent or even occasional occurrence of these automatic, involuntary, choreic movements of the lower and upper extremities and intermediate parts of the trunk of the body, and also of the various muscles of the face, concurrently combine to indicate, that the several parts of the *motor* nervous apparatus now referred to, were in an unhealthy, *impaired*, or irregular functional activity. The muscles employed in giving the varied forms of expression to the countenance were, at times, thrown into remarkable irregular functional activity, thus imparting singular shades and varieties of expression to the patient's countenance; from these observed facts, I infer, that the nerves supplying these muscles of expression with nervous energy, whatever may be the nature of this nervous energy, as well as the nervous masses or ganglia, from which the nerves themselves derive their peculiar force or power, were more or less affected with disorder or derangement of their respective functions; for anatomy teaches us that the nerves which supply with nervous energy the muscles of the face are, for the most part, derived from the fifth and from the motor portion of the seventh pairs of cerebral nerves, which have their so-called origin at the upper part of the cerebro-spinal axis. An inspection of the base of the brain, as commonly seen in the dissecting-room, or in the dead-house, will confirm this statement.

Further, I may add, that the *sensory* nerves which supply the general cutaneous surface were in this patient, at times, in a state of hyperæsthesia; I do not use this term, in the present instance, as denoting the presence of pain, for the patient seldom, or almost never, complained of pain in any part whatever of the body; but rather, as denoting an exalted, *perverted* state of sensibility of the general cutaneous surface;

and from the phenomena I occasionally observed, I was led to the conclusion that a brighter light of day than ordinary exerted an undue, irregular action upon the cutaneous membrane, which was also, I conclude, more or less affected by other imponderable agents besides light, such as, for instance, heat and atmospheric electricity. I am decidedly of opinion that, in this patient, light, heat, and electricity as existing in the atmosphere, and more especially the former of these agents, *light*, exerted a very marked influence upon the cutaneous membrane. For, on very bright days, and in what is commonly termed cheerful weather, the patient was more than usually excited to general motion of the body; so much so at times, that it, the light, appeared to act too powerfully, not so much upon the organ of the sense of vision, as upon the organ of the general cuticular sense. The patient would not unfrequently complain that, in bright days and during cheerful weather, she could not control a general restlessness of the body, that, in common language, she could not keep herself still and quiet in one position of the body, but that she felt herself compelled to move about from room to room of her house; and this, too, at times, with considerable energy and rapidity of motion.

Now, anatomy teaches us that the nerves of sensation supplying the general cutaneous surface are derived from the various portions of the cerebro-spinal axis, and therefore I regard this general restlessness of the body as the expression of an excito-motor, or reflex action, induced by irritation of the sensory nerves of the cutaneous surface; and as such, altogether automatic, *involuntary*, and independent of the action of the will exerting its influence upon the motor nerves of the trunk of the body. At these same periods of bright days, and cheerful weather, the patient was most unwilling to subject her body to any kind of restraint from the action of tight clothing; this was preferred to be of the lightest and loosest description of apparel. When walking in the garden she preferred to be without cap or bonnet, and much more so whilst within doors, when she would seldom be prevailed upon to wear any kind of cap fastened in the ordinary mode upon the head, the hair of which consequently was most commonly worn in its natural, unadorned state.

The visage or physiognomy of this patient at times, without being in any marked degree convulsed or in motion, presented a very remarkable appearance, as may very easily be imagined, if we consider that on these occasions the action of the muscles of expression of the countenance was not spasmodic, as in convulsions, although it was altogether *pervverted* in its character. To give one instance by way of

imperfect description of its appearance at these times, I have witnessed the countenance to resemble, in some feeble degree, that of a ferocious cow or ox; or, in plain language, the patient would on these occasions look almost bull-headed.

In direct relation to the fore-mentioned circumstance, namely, the influence of light or bright weather upon the disordered nervous system of this patient, I may state, that this circumstance might be considered as nothing more than a part of the influence which weather is well known to exert upon the human subject, even when in health, not to speak of its more potent influence upon the human subject when suffering from disease.

In the able and classical work of Sir Henry Holland, entitled "Medical Notes and Reflections," the author has devoted one entire chapter to the consideration of the influence of weather in relation to disease, yet, in that chapter, he does not enter upon the discussion of the influence of *light* as an element upon disease; although it may be possible he would regard *light* as so closely connected with the term weather, as not to be dissevered from it when treating of the influence of weather upon disease. In the case of my patient it seemed to me that variations in degree of this imponderable agent, *light*, exercised a most marked influence upon the nervous system, and this, too, not through the organs of vision, but rather by means of its influence upon the general cutaneous surface.

In opposition to this view of the subject, I readily admit that it might be alleged, and not unreasonably, that the phenomena I observed, and which I have attempted to describe, were due, not so much to *light*, *per se*, as to heat or alterations in temperature, and consequently to atmospheric electricity; for the recent investigations of modern science have made evident to us, that the existence of bright light is coincident with the existence of increased heat or temperature, and the presence or existence of both light and heat are attended with an evolution of atmospheric electricity; for it is now known that no two bodies can be present to each other, having different temperatures, nor can even separate parts of the same body be heated to different degrees of temperature, without causing an evolution of electrical change.

This important subject cannot now be fully discussed; still, I need not forbear quoting from the chapter in Sir H. Holland's book to which I have but just now adverted. The chapter is entitled, "Influence of weather in relation to disease:"—

“Little though its influence has yet been defined, I believe that the electrical state of the atmosphere is that, of all its conditions, which has most important and diffused effects on the animal economy; more rapid and pervading than any other, and is one of the vital stimuli more intimately allied to the functions of the nervous system. It is that, further, which most closely blends itself, either as cause or effect, with all other meteorological changes; producing thereby many of the difficulties already noticed in estimating their relative amount of influence.” And further, in the same chapter, Sir H. Holland writes:—“It is difficult to advert to the effects of atmospheric electricity on the body, either as a vital stimulus or cause of disease, without noticing the question, whether this great natural agent is not itself directly engaged in the functions of the nervous system? If this were eventually determined to be so, the relation of the actions without to those of the same agent within, would present itself under forms still more difficult to apprehend, and little amenable to our present means of research. But, taking the simplest view of the influence of electrical states of air on the human frame, many circumstances occur well deserving notice, though yet wanting the certainty needful to give them a place in science. Without adverting to those singular cases in which the balance of electricity with external objects seem altered by the production of an excess of it within the body, it is obvious that changes of atmospheric electricity have much influence both on the sensations and voluntary powers, producing results variously analogous to those which attend certain morbid states of body more familiar to us.”

In a former communication to the “Medical Mirror,” I ventured to suggest as an appropriate designation for such cases of disease as the present, and others of a varying yet similar description, whether occurring in the male or in the female sex, the term *somapsychopathy*, which I am disposed to think will better serve to convey correct ideas of the nature of the diseases in question than the term *hysteria*, which has hitherto been employed, and which, in my judgment, is calculated to mislead, and to convey erroneous notions as to the real nature of these diseases, as well as imperfect views of the true pathology of them.

(To be continued.)

Abbreviated Notes of Seventy Cases of Acute Rheumatism.

Reported by N. HECKFORD, M.R.C.S., late House Surgeon, &c., to the London Hospital.

These cases were under the treatment of Drs. Little, Fraser, and Davies, and occurred during a period of eight months (from August 1862 to March 1863).

On referring to the various occupations of the patients no peculiarity was observed, excepting that labourers, domestic servants, and milliners gave the largest numbers, although the habits of the former class are quite opposite to those of the latter.

The males exceeded the females by 21 per cent. The usual external appearance was fair complexion with brown hair, and brown, blue, or grey eyes.

The skin was dark in seven cases only, and in all these the symptoms were not very acute. Black hair was present in five instances, and dark, black eyes in one, only.

For the sake of convenience, the previous health or constitution was classified under two heads, viz., robust and delicate, though of course there were many variations in degree. The robust or full-blooded predominated in the ratio of five to two. 71 per cent. were under 30 years of age, and only 11 per cent. were above the age of 40. The youngest patient was twelve years old.

Seventy-six per cent. were habitually exposed to vicissitudes of temperature. A hereditary tendency to the disease existed in 64 per cent.

Twenty-nine per cent. only were in the habit of consuming large quantities of meat or malt liquor, and the diet of 34 per cent. was of a mixed description and moderate in amount; whilst that of the remaining 37 per cent. was scanty, and chiefly farinaceous.

The knees, ankles, and wrists were the joints most frequently inflamed, and in 65 cases the knees escaped in two only. The shoulder-joints were usually the last to recover.

The sweat remained intensely acid long after the neutralization of the urine by alkaline remedies. The amount of cutaneous secretion was in direct proportion to the severity of the attack, and those who perspired but little were generally troubled with chronic pains subsequently. One acute case, however, had a notable diminution of the usual profuse sweating, but here the complication of double pneumonia existed.

The saliva was acid also in many instances.

It is remarkable that 54 per cent. of these patients suffered from well-marked dyspepsia for some time previous to

the rheumatic attack, and in many others it is possible that this fact had escaped observation. 45 per cent. also had costive bowels at the time of the seizure.

Probably there is more in this than a mere coincidence, notwithstanding that dyspepsia is common in many diseases. It may be that it is the great common cause of many apparently independent diseased conditions.

To have indigestion a man must have committed large excesses in diet, either as regards quantity or quality, his processes of assimilation and metamorphosis are of a necessity interfered with, free acids are generated in the alimentary tract and absorbed, and the blood is loaded with effete materials.

These under favourable circumstances are eliminated by increased action of the emunctories, but if such a man were suddenly placed under certain conditions tending to check this elimination, viz., exposure to cold (with consequent cessation of the cutaneous functions, and also an unusual torpid state of the intestinal canal), would it not be reasonable to suppose that some decided morbid action would result? Although cold and moisture are considered to be the immediate cause of rheumatism, there must be some predisposing cause, for how else is it that, placed under the same external circumstances, a man will at one time suffer from such exposure, and not at others.

Why the rheumatic state is induced in a certain number of cases in preference to other inflammatory manifestations is inexplicable, but is doubtless due to fixed though unknown laws.

Seventy-two per cent. were subject to attacks of tonsillitis, and in about half of these the tonsils were still enlarged. I may here observe that Dr. Andrew Clark has directed attention to the close relationship between chronic follicular hypertrophy of the tonsils, dyspepsia, and rheumatism in all its varieties.

The explanation is probably this:—The tonsils in health have a considerable share in the conversion of starchy food. When diseased, therefore, this process becomes incomplete, and, moreover, they at the same time secrete a peculiar, offensive, cheesy-looking matter, which, if swallowed, by its decomposition and fermentation, contributes greatly to the production of dyspepsia. The rheumatism results as a consequence of the vitiated state of the blood thus produced.

Thirty-nine per cent. had previously suffered from ophthalmia, showing a latent rheumatic diathesis, and perhaps indicating the proper constitutional treatment of this affection.

Until latterly the administration of alkalies was the

treatment universally adopted at this hospital in cases of rheumatic fever. Dr. Davies has now, however, introduced a method of treatment by blisters only, entirely discarding the use of drugs. Of the great success of this plan there cannot be any question (see Dr. Davies's paper on this subject in the London Hospital Reports); but as these notes were taken prior to the introduction of this novelty, we must confine attention to the efficacy of the first mode alone.

At one time the usual dose of the alkali prescribed was a scruple of bicarbonate of potash every four hours, amounting in all to two drachms per diem. Subsequently the amount was doubled and quadrupled with a corresponding benefit.

About two-thirds of these cases were treated according to the first, or what was termed the "mild alkaline plan," and the remainder on the full alkaline plan. The minimum dose under the latter was half an ounce of one or more of the preparations of potash in the twenty-four hours.

On an average those thus treated left the hospital ten days earlier; duration of residence in hospital of the former being thirty-eight, and of the latter twenty-eight days.

Again (as on an average the latter cases were of a more recent character), the entire duration of the attack in them was thirty-seven days, and in the others forty-nine days.

I believe that more marked results would have occurred if the expectations had not been so sanguine; the decided and speedy benefit afforded in many cases by the full alkaline treatment led to its suspension somewhat too early, when relapses as a consequence resulted. The urine usually became alkaline under this treatment within twenty-four hours, whereas formerly it was frequently found to be acid even at the end of a fortnight.

Alkalinity of urine, therefore, is by no means an indication for diminishing the doses of the drug; the state of the joints and the thermometer being the only true guides to the duration of treatment. Another point of great importance, and exemplifying the efficacy of this improved method, is that no instance of heart complication occurred *after admission*, in those who were subjected to it, whereas five, if not six, cases treated under the old plan had heart disease.

On the subject of heart disease it was noted that thirty-one in seventy were thus affected. In eight of these, however, it was probable, and indeed almost certain, judging from the histories, that it was the result of a former attack. Of the remaining twenty-three recent cases, seventeen were admitted with heart disease, and the other six were amongst those treated on the mild alkaline plan. As regards the precise nature of the lesion, twenty-five were purely endo-

cardial, one purely pericardial, and in five there was a combination of the two.

The mitral valve was affected in eighteen instances, and in six others in conjunction with an additional lesion. The great frequency with which the mitral valve is affected commands notice. Why the right side of the heart should, as a rule, escape is inexplicable. One would be led to imagine that some change took place in the blood when in the lungs, and that the poison there generated expended itself before reaching the venous side of the organ. In three instances endocardial murmurs (two mitral and one aortic) disappeared under treatment. This was perhaps due to the redissolving of the effused fibrin by the restored alkalinity of the blood.

Three cases proved fatal, the particulars of which have been recorded in the "Lancet" of October 15, 1864. The causes of death were—1st. Rupture of intra-pericardial aneurism. 2nd. Pulmonary apoplexy and clot in the heart. 3rd. Rheumatic meningitis.

Of the preparations of potash, the bicarbonate was universally used, either alone or in combination with the acetate, and nitrate, the most common formula being potas. bicarb., ʒss., potas. acet. ʒi., potas. nit. gr. x., 3tis. hor. These large doses had a tendency to produce diarrhæa, but this difficulty was at last overcome by large dilution with water.

As the treatment by alkalies is the one now generally adopted, these cases are of some interest. It is obvious that its success depends upon *large doses*.

ROYAL COLLEGE OF SURGEONS.—The annual report of the receipts and expenditure of the College has just been published, from which it appears that the former amounted to £13,806 14s. 8d., being an increase of £1,396 13s. 8d. over the preceding year. The disbursements amounted to £12,844 13s. 3d., or only £425 16s. 2d. more than last year. The College department is put down as absorbing the largest amount, viz., £7,998 17s. 1d., including fees to Council Courts of Examiners, diploma stamps (£1 each), list of members, coal, salaries, wages, and law expenses. The Museum department cost £2,264 13s. 8d., and the Library department is put down at the moderate sum of £601 18s. The total number of fellows, in whose hands the elections into the Council are vested, amounts to 1,296.

REVIEWS AND NOTICES OF BOOKS.

Der Typische Frühsommer-Katarrh, oder das sogenannte Heufieber, Heu-Asthma. Von PHILIPP PHÆBUS, M.D., Ph.D., Prof. Med., Giessen. (*On the Typical Catarrh of Early Summer, or the so-called Hay-Fever, or Hay-Asthma.* By P. PHÆBUS, M.D., &c.) Pp. 284, 8vo. Giessen: J. Rickersche.

It is a singular fact, that the only detailed account of an affection which has been more often observed in this country than elsewhere, has emanated, not from one of our fellow-countrymen, but from a foreigner. Dr. Bostock, it is true, wrote a graphic account of his sufferings, for he was himself a martyr to hay-fever, in the "Medico-Chirurgical Transactions," and a few brief papers on this disorder may be found scattered in the medical journals; but these contributions are insufficient to supply the want of complete information on hay-fever. In fact, we would venture to state, without fear of contradiction, that there is no other affection concerning which a greater degree of ignorance exists, than that which forms the subject of Dr. Phœbus' book.

The present work is therefore peculiarly welcome; for the learned Professor of Medicine in the University of Giessen, has given much original matter, besides completely exhausting the literature of the subject. Not content with what he could find already written, he announced in various English, French, German, and other continental medical journals, his desire for any individual information upon hay-fever; and the list of names given in the Preface, of gentlemen who responded to his request, shows that it elicited great readiness to assist the author in his investigations.

As the affection is attributable to other causes besides the smell of hay, Dr. Phœbus, as may be seen in the title, prefers, instead of calling it hay-fever, to designate it by another name, which may be abbreviated to "Summer-Catarrh;" as, however, hay-fever is the term by which it is commonly known, we shall use both indiscriminately in the following remarks.

Until a comparatively recent period, the disease appears to have altogether escaped notice, as no mention of any affection analogous to hay-fever can be found in any author prior to the time of Heberden, who refers to it very briefly only. Bostock published a description of a case of hay-fever in the "Medico-Chirurgical Transactions" for 1819, and Baillie, in 1822, gave an account of three other cases.

As we have already remarked, English medical literature is poor in published cases of this affection, and that of other countries is still more meagre. The question consequently arises, Is hay-fever a disorder of recent origin, or did the older physicians know of it, without thinking it worthy of special notice? To the former part of the question, we must naturally demur, for the causes of the affection are common, and have always existed, so that it is highly improbable that the disease can have arisen only in recent times; as regards the second portion of the question, we are at a loss to decide, as, however much we may pride ourselves upon our modern superiority in medicine, our ancestors were keenly observant of the phenomena of disease, and were not likely to wholly ignore the existence of an affection which recurs periodically in its victims, during a considerable portion of their life-time. It would, however, serve no useful purpose were we to attempt to unravel this mystery, and we will therefore pass on to the consideration of the disorder itself.

The symptoms are arranged by the author into six groups, which, up to a certain point, may exist independently of one another, so that in different cases some sets of symptoms may predominate, and others be wholly wanting.

The first of these is connected with the nose, the symptoms being those of a severe common catarrh, especially sneezing, which is very loud and frequent, and recurs in paroxysms of ten, twenty, or more sneezings in rapid succession, at intervals throughout the day; so that the patient will be heard to sneeze some hundred times in the course of twenty-four hours. At the commencement of the attack there is no discharge of nasal mucus; but, after a few days, a very great quantity of fluid, resembling clear water, is discharged from the nose. The nose is very frequently swollen, but the sense of smell is very seldom lost.

The second group of symptoms are observed in the eyes, and the patient complains of the symptoms of catarrhal ophthalmia, with increased lachrymal secretion. The conjunctiva of the eyelids, particularly at the edges, is the seat of unpleasant irritation, and is red and swollen, secreting thick matter. The eyesight is weakened, especially in the morning, and intolerance of light is often present. The eyelids are frequently swollen, and even oedematous. Both eyes are usually affected simultaneously.

The third group of symptoms affect the throat, and resemble those of slight catarrhal sore-throat. The pharynx appears red, and is a little swollen; the mucous secretion is at first diminished, but is subsequently increased, and becomes very abundant; the uvula and the tonsils are seldom affected.

The symptoms of the fourth group are those of headache, sometimes slight, sometimes very severe, and situated either at the forehead, the occiput, or over the whole of the head. The pain is very often brought on and increased by the paroxysms of sneezing. The patient complains of a disagreeable feeling of itching about the forehead, the nose, the chin, and the meatus auditorius. Some patients also complain of giddiness, of noises in the ears, and other symptoms of congestion of the brain, particularly if the sneezing has been very great.

The fifth group of symptoms is situated in the whole of the mucous membrane of the larynx, extending as far as the bronchi, and the patient suffers from bronchial catarrh. In some persons, the cough is insignificant, while in others it is very severe, and loud, and accompanied by expectoration, which, in rare cases, is streaked with blood. Frequently, a sensation of irritation is felt in the larynx or in the trachea, and there is a feeling of weight under the sternum; the voice is muffled, and often hoarse. The dyspnœa is occasionally very distressing, and sibilant râles may then be heard in the lungs. The attack becomes more strongly marked towards evening, and continues during the whole of the night. In the intervals of freedom from dyspnœa no organic lesion of the chest can be discovered upon auscultation.

The sixth group, which comprise the general symptoms, are those of catarrhal fever, with disturbance of the nervous system. The pulse is not greatly increased in frequency, excepting towards evening, when the number of beats may mount up to as many as 120 in a minute. Alternate shivering and perspiration come on after the sharp attacks of coughing and sneezing. The patient is uneasy, restless, unable to attend to his ordinary duties, and complains of weariness, defective memory, and excessive sensibility, with great excitability of the imagination, and sleeplessness. The digestive organs are seldom affected; when they are, loss of appetite, furred tongue, constipation, or diarrhœa, may be present.

The principal characteristic of the disease is its periodical return, almost invariably, at the end of May, or the beginning of June, in every year after it has made its first appearance, the period of recurrence bearing a relation to the first heat of summer. In some patients, the affection shows itself even earlier, namely, towards the end of April, if the weather happens to be warm.

The premonitory symptoms only last for a few days, and consist of uncomfortable sensations in the different organs where the disease afterwards becomes localised, and of a

general feeling of ill-health. The permanent symptoms generally come on suddenly, and continue for several weeks. The eyes and nose are the parts which are first affected; next, the sore throat makes its appearance; the bronchial symptoms are not present until a week or two later. When the temperature is lowered, the bronchial symptoms are intensified, while heat causes them to disappear, when the mucous membrane of the eyes and nose suffer more severely. The symptoms connected with the eyes and nose are most marked in the morning; the dyspnœa and fever, on the contrary, are increased towards evening. As the affection wears off, the local symptoms become lessened, and gradually disappear; and there remain only general debility, and feeling of ill-health, with morbid sensibility of the body and mind. There is always a tendency to a relapse, if the patient should happen to be again exposed to the action of the predisposing causes of the malady.

The duration of the attack is very variable in different individuals. The minimum is three or four weeks, and the average from six to eight weeks; in some persons it may even last as long as three months, but seldom longer than this period. In the same patient the duration of the attack increases during the earlier years in which he suffers from hay-fever, and, still later, it begins to diminish. Almost all patients speak of the first heat of summer, in May and June, as their critical period; a second attack rarely occurs during the autumn.

The disorder always terminates in a cure; that is to say, the cure is only apparent, because the predisposition to the malady remains, and the following year is almost sure to bring with it a new attack. Still, for the time being, the cure is as complete as can be desired; for all the symptoms disappear, and, in the month of September, persons may expose themselves with impunity to the same causes which in the month of June had given rise to the attack.

The age at which the malady makes its first appearance varies considerably, from ten to forty, in fact; but no case has ever been recorded in which the first attack occurred after the person had attained the age of forty. Generally speaking, when the disorder has once appeared, it is followed in the subsequent year by another attack, and recurs annually during the whole lifetime of the patient, if he remains exposed to the same influences of season or of climate; for, although visits to warmer countries (such as the south of Europe, China, India and the Cape of Good Hope), have a beneficial effect in checking the disorder, the effect is only temporary; and when the patients return to the country where they had

previously lived, the attack invariably returns in the following summer.

Amongst the causes of hay-fever, a predisposition to its attacks is one of the principal; for, although a very great number of persons are exposed to the various influences which produce the disorder, only a small proportion of persons suffer from it; in those, however, who are attacked, the affection is so severe, and so little amenable to treatment, that we can only account for this peculiarity by supposing that it is connected with a predisposition which is inherent in the individual, and has its seat in the mucous and nervous systems. Contrary to the commonly entertained opinion, men are more subject to summer-catarrh than women; the cases given by Dr. Phœbus furnish a proportion of 104 men to 50 women. These patients were, for the most part, persons of the nervous diathesis, and were in good circumstances. This does not, however, prove conclusively that the poor are less subject to summer-catarrh than the rich; but it seems rather to depend upon the general fact, which holds good in all diseases, viz., that the poor, being less able to spare either time or money than persons who are better off, are prevented from seeking medical aid until they are almost incapacitated for work, and, consequently, are less likely to come under medical observation.

It was at one time thought, that hay-fever, or summer-catarrh, existed only in England, but the answers elicited by Dr. Phœbus's appeal for further information on the disorder, tend to show that it is spread over almost the whole world. About one-half of the cases reported occurred in England; next in number are the German, French, and Belgian cases; while the list also includes cases which occurred in Italy, Russia, Denmark, Hungary, China, and India. It is probable, in some degree, that the apparent greater frequency of summer-catarrh in England is due to the attention which has been directed to it by the writings of Bostock, and others of our countrymen.

Hay-fever is more often observed in the country than in towns, in the suburbs than in the centre of large cities; and more frequently in countries where grass lands abound, than where wheat is principally cultivated, or near the sea-coast.

The exciting causes of the affection are the following:—
1. The flowering of wheat and of grasses (whence the name of hay-fever, or hay-asthma is derived). The fresh plant is not so often looked upon as the cause of the disorder as the hay itself. The species of grass which are considered as most productive of hay-fever are the *Lobelia perennis* and the *Anthoxanthum odoratum*, especially the latter. The odour of

roses, and of other flowers, has also been suggested as an exciting cause. The odour of ipecacuanha, when powdered, and of other substances, in a minute state of subdivision, so that the particles are small and irritating, will induce this affection in individuals who are predisposed to it. Dr. Watson mentions, in his lectures, the case of a man engaged in the laboratory of St. Bartholomew's Hospital, who was seized with such violent catarrhal symptoms whenever ipecacuanha was being ground to powder, as to compel him to leave the room in which the process was conducted. 2. The first heats of summer. To these, according to Dr. Phœbus, the disorder is chiefly due. 3. The influence of light, because the attacks are always prevalent during the longest days in the year, when ozone is developed in greater quantity. In fact, one patient, a professor of chemistry, complained of a continual taste like that of ozone.

The disorder is made worse by various influences which equally aggravate common catarrhs, such as sudden changes (particularly falls) in the temperature, windy, or stormy weather, evening chills, and exposure to draughts of cold air; and by any causes which weaken the patient, or disturb the nervous system.

The affections for which summer-catarrh is most likely to be mistaken are catarrh, catarrhal ophthalmia, bronchial catarrh, asthma, influenza, and vesicular emphysema of the lungs; but the periodical nature of summer-catarrh, which returns every year about the same time, will serve to distinguish it from most of these disorders, and the progress of the symptoms, the almost incessant sneezing and coryza, and the absence of any signs upon auscultation or percussion of the chest, in summer-catarrh, will generally confirm the diagnosis.

The prognosis is usually favourable, so far as any danger to life is concerned, for, after the attack has passed off, the patient is in as good a state of health as he was previously. According to most authorities, when once hay-fever has shown itself in an individual, it will continue to recur yearly, as long as the patient lives. There is, however, no reason for doubting that the symptoms may generally be greatly mitigated; and, unless in cases where the predisposition is strongly marked, careful avoidance of the apparent cause, and judicious treatment, may conjointly succeed in eradicating the disorder.

The practice of medicine may be compared to warfare. When prepared to face a known enemy, the combatants present themselves, armed with similar weapons, which make up for want of variety by their fitness for the use for which

they are intended; but, if an unknown, unexpected foe suddenly breaks in upon the camp, each man seizes the nearest weapon at hand, for the purpose of repulsing him; and, instead of a well-disciplined line for defence there is nothing but a confused mob of soldiers, furnished with dissimilar arms. So in the case of practical medicine; if the pathology of a disease be known, we are ready with few, but certain, remedies to combat its attacks; but, if we are ignorant, or doubtful of the manner in which the affection arises, there is no longer any similarity of treatment, and one physician prescribes one remedy and one another, until a crowd of heterogeneous remedies are used for the same purpose. In hay-fever, for instance, the uncertain etiology and pathology have led to wide discrepancies in treatment. One physician orders cold, while his colleague would assuredly recommend warm, applications; again, one practitioner prescribes depressing, when a second would give stimulating, remedies. The evil of insufficient knowledge of hay-fever is fully displayed in that portion of Dr. Phœbus's book in which he writes of the therapeutics of the disorder.

The remedial measures which the writer of this article, who has had numerous opportunities of observing summer-catarrh, has found most useful, are: the removal of the patient, when practicable, beyond the influence of the exciting cause; warm fomentations to relieve the swelling and pain of the conjunctivæ; the frequent inhalation of the steam of warm water to alleviate the irritation of the mucous membrane of the nasal and other air-passages; small pieces of ice, to be occasionally dissolved in the patient's mouth, so as to obviate the heat, dryness, and tickling sensation of the fauces; the administration of lobelia or some other sedative and antispasmodic; (tobacco-smoking often does wonders in diminishing the severity of the attack, in males); bitter vegetable tonics, such as quinine, and the preparations of zinc, iron, arsenic, and other mineral tonics; and, though mentioned last, not least important in effecting a cure, the regulation of the secretory and excretory functions by appropriate medicines.

Dr. Phœbus concludes his valuable work by an historical sketch of summer-catarrh, in which, as in the body of the treatise, he affords strong evidence of the spirit of research, and careful study of the subject, which have combined to render his monograph as perfect as it is interesting.

We have found it impossible, in the limits of an ordinary notice, to do adequate justice to the merits of this treatise. It is ably written, and throws considerable light upon an hitherto obscure and singular affection. If the Council of

the New Sydenham Society will accept our recommendation, we may add that we know of no translation which would be so likely to obtain the general approbation of the members as that of Dr. Phœbus's work on summer-catarrh.

The British Army Health Reports for 1862.—Compiled by Order of Government.

HAVING received the British Army Health Reports for the year 1862, which have just been issued by order of the Secretary of State for War, we are enabled to lay before our readers an abstract of some of the information contained in them. The statistical report, compiled by Dr. T. Graham Balfour, is dated May, 1864.

I. UNITED KINGDOM.—Average strength of forces (non-commissioned officers and soldiers), 78,173. Admissions to hospital, 77,332. Deaths, 682. Average number constantly sick, 4,178. For every 1,000 of mean strength there were 989 admissions to compare with 1,040 in 1860-61 (the average of the two previous years), 8·72 deaths with 9·61 in 1860-61, 53·45 constantly sick, with 54·66 in 1860-61; so that the ratios of all three were lower than those in the preceding years.

Admissions.—There was a decrease in the items of miasmatic and venereal diseases (considerable), of those of the respiratory system (not so great); an increase in parasitic diseases. Mortality diminished in miasmatic diseases, and in those of the respiratory apparatus; increased in tubercular diseases. The decrease of admissions most marked at the stations of depôt battalions and seaport towns; fewer sick in the "Tower," formerly the most unhealthy barrack in London, and noted for the prevalence of diarrhœa among the troops. In cases where eruptive fevers have been more prevalent than in 1861, it has been from small-pox, scarlet fever, and measles. Four cases of small-pox proved fatal. Scarlet fever and measles were sometimes epidemic among the children, but not among the troops. Paroxysmal fevers chiefly occurred in men who had suffered from intermittent fever during previous service in India.

Venereal Disease.—Constantly sick, over 22 per 1,000, mean strength; admissions into hospital, 330 per 1,000, average duration of cases, over 24½ days. *The inefficiency from this cause equals the loss of service of every man in the home force for over eight days, or the constant loss of over two regiments*

for the whole year. But the prevalence of syphilis was less than in 1860-61, by the proportion of 183 to 210 per 1,000.

No cause is assigned for the great increase of diseases of the respiratory system in London and Windsor. In other stations there was a decrease. Admissions to hospital have increased in the Cavalry, Military Train, and Foot Guards, decreased in all the other arms. Mortality increased in the Household Cavalry, Royal Engineers, Foot Guards, Cavalry Depôts, and Depôt Brigade, Royal Artillery, but much decreased in the other arms. From tables, it appears that the mortality in the Cavalry, Artillery, Artillery Train, and Infantry regiments in 1862, has been less than that of the civil population of the healthy districts; that of the Household Cavalry less than the average of England and Wales generally, while in the Foot Guards and the depôts it has been greater. But the process of invaliding somewhat reduces the apparent mortality. The invaliding has been much less than in 1861 in all arms except the Household Cavalry, Foot Guards, and Royal Artillery. The mortality of the invalided has been less than in 1860-61, in the Cavalry, Artillery, and Infantry. The greater mortality in the Household Cavalry and Military Train has arisen from exceptional circumstances.

Ophthalmia has prevailed much less than in 1861. Admissions from tubercular diseases have been numerous in the Foot Guards and depôt battalions, partly perhaps from the transfer of the weakly men from the battalions proceeding on foreign service. Still, "if the mortality were calculated upon the strength of the whole brigade (Foot Guards), including the battalions in Canada, it would amount to 4.35 per 1,000, or nearly double the proportion in the preceding year." The number of cases, directly the result of intemperance, has been in most instances much increased. Corporal punishment has ranged between 6.4 per 1,000 in the Military Train and 0.6 in the Foot Guards. Re-vaccination gave much fewer perfect vesicles among the soldier, and more failures; but was more successful among those who bore no marks of either variola or vaccinia. The four fatal cases of variola are stated to have all borne marks of vaccination. "The proportion of men wholly unprotected was much lower in Ireland than in either England or Scotland; the districts in which the proportion was highest being Edinburgh, Liverpool, and Bristol. If this may be assumed to represent correctly the state of vaccination among the class of population from which the recruits are mainly drawn, it would seem to show the necessity for some stringent measure to enforce the adoption of so simple and effectual a prophylactic against small-pox."

Influence of Age on Mortality.—On the average of three years, the mortality in the regiments has been lower than in civil life under 25 years of age; the same as in civil life between 25 and 30, and considerably higher at the more advanced ages.

Recruiting.—Rather more have been rejected in 1862, but as the number inspected was one-third less, probably greater strictness may have been exercised in the selection. There has been an increase in the proportion of Scotch, and a decrease in that of English and Irish recruits.

Causes of Rejection.—As usual, malformed chest, muscular tenuity, defects from fractures, &c., varicocele, varicose veins, diseases of the eyes and eyelids: all these were the cause of more than half of the rejections. A considerable increase in 1862 from diseases of the eyes, decay of teeth, varicocele and muscular tenuity; a decrease of rejections from scrofula, malformed chest and spine, unsound health as shown by marks of treatment and hernia. Rejections much more frequent for diseased eyes in Ireland than in England or Scotland. The minimum height for recruits was five feet six inches. The tallest men were from the Scotch, the shortest from the Irish districts; greatest proportion of medium height from the English. There was a decrease in the proportion of *uneducated* in England, but scarcely any difference in Scotland and Ireland. It is stated that in the French army (young men liable to conscription) the proportion of the wholly uneducated is higher than among British recruits.

Occupations of Recruits.—In England the ratio is higher than before of shopmen and clerks rejected. From Ireland there were more labourers and manufacturing artizans enlisted, much fewer mechanics and shopmen. From Scotland fewer labourers, more mechanics. “The low ratio of rejections at the secondary examinations after army surgeons is very satisfactory, as showing the care with which that duty has been performed by the medical officers in charge of recruiting districts, by whom all, or nearly all, these men must have been primarily examined.”

II. ON THE HEALTH OF THE TROOPS SERVING IN THE MEDITERRANEAN.—GIBRALTAR.—The proportion of admissions and deaths was lower than in the previous three years by 20, and 1·86 per 1,000 respectively. Continued fevers were caused by imperfect sanitation of the barracks and town, exposure to the sun on the public works, and intemperance, and were often followed by rheumatism and orchitis. Cases of syphilis and those arising directly from intemperance had decreased.

MALTA.—Admissions and deaths much decreased, particularly in miasmatic and enthetic diseases, diseases of the

respiratory, digestive, and integumentary systems, as well as accidents and injuries. Continued fevers were lessened materially by the improved sanitation.

Ophthalmia has become more prevalent, and the chief cause of this seems to be the deficiency of the arrangements for "ventilation, combined with deficiency in washing and bath-rooms, and neglect of proper supervision over the men when performing their ablutions," and "that once established, it spreads by contagion, experience has now fully proved."

In *syphilis* the reduction of cases is most marked: the number not being a half of that for 1861, and about two-fifths of the average of the three years, 1859—61. "This is attributed to the adoption, in the middle of 1861, and to the efficient execution, of a system of police surveillance of the prostitutes." Intemperance rather on the increase.

IONIAN ISLANDS.—Sickness and mortality much less than before, chiefly as regards venereal and diseases of the respiratory and integumentary systems. *Ophthalmia* in excess of the average.

Extent of INVALIDING in the Mediterranean. "The proportion finally discharged from the service in 1862 was considerably above the average from Gibraltar, the principal causes being cardiac, pulmonary and mental diseases, and those of the eye. Pulmonary and ocular diseases were the chief causes of invaliding from Malta, while from the Ionian Islands there was no marked predominance of any particular disability." In both there has been a very marked reduction in the proportion and duration of sickness. The mortality under the age of 30 less than before, less indeed than that of the male population (same ages) in England.

III. BRITISH AMERICA.—BERMUDA.—Admissions were much more for dysentery, diarrhæa, influenza, &c. This may have been caused partly by a portion of the troops having been kept under canvas. Intemperance more than three times that of 1861.

NOVA SCOTIA AND NEW BRUNSWICK.—The number of troops were much increased in this command, owing to alarm at the state of our relations with the United States. Of 6,544 who passed through into Canada, two casualties only occurred during the transit, one man having been frozen to death when intoxicated. While in the command, this temporary force was much more sickly than the permanent forces, chiefly from diseases of the chest, venereal, and accidents. Continued fevers were increased in the permanent force through defective water supply, and a temporary exposure to the air of drains and accumulations of filth.

Mortality.—Four deaths in the temporary and four in the

permanent force arose from intoxication. Chest diseases small in number in the permanent force.

CANADA.—Notwithstanding the great influx of troops and consequent overcrowding of barracks, &c., the proportion of sick was not much higher, and the mortality no higher than previously. *Enthetic diseases* were much increased.

NEWFOUNDLAND.—More venereal, much less of chest and nervous diseases and accidents.

BRITISH COLUMBIA.—No sickness of importance.

IV. WEST INDIES.—WINDWARD AND LEEWARD COMMAND.—*White Troops*.—Sickness and mortality much increased, chiefly from *miasmatic* diseases. *Dietic* nearly doubled. Chest diseases much less. Agues prevalent in British Guiana. Yellow fever in Barbadoes. In the latter epidemic, the removal of the troops to tents on high ground, was attended by great benefit. *Intemperance* has been on the increase. *Mortality* very small.

Black Troops.—Sickness and mortality reduced. No yellow fever, but at Barbadoes they suffered much from remittent. “*Tubercular* diseases are still the principal cause of mortality among the black troops.” *Diseases of respiratory system* also very fatal. *These two classes together* gave rise to nearly half the deaths during the year, and to a ratio of mortality closely approximating that from all causes among the troops generally in the United Kingdom.

JAMAICA.—*White Troops*.—Relative *mortality* greater than in 1861. *Sickness* less, most so in paroxysmal and continued fevers, ophthalmia and enthetic diseases.

Black Troops.—*Mortality* increased, chiefly from *tubercular* diseases. *Venereal* has been six times as prevalent among the black as among the white troops.

BAHAMAS.—Much sickness, owing to the prevalence of fevers, which co-existed with an outbreak of yellow fever among the civil population (the black troops not suffering from it), and of venereal, spread by the increase of shipping in the harbour of Nassau. Mortality in the garrison (black troops) nearly 30 per 1,000, very high, and caused chiefly by *Tubercular* and respiratory diseases.

HONDURAS.—Of a force of 310 (black troops), there were only two deaths from disease; one consumption, the other inflammation of the bowels. *Invaliding from the West Indies* has been much in excess, and markedly from ophthalmia (white troops).

V. WESTERN AFRICA.—There have been no eruptive or continued and fewer paroxysmal fevers. Dysentery and diarrhæa very prevalent, owing to a very wet season.

LAGOS was very unhealthy, and a complete want of sani-

tation is noticed. Venereal very prevalent also. The Guinea worm not so very prevalent in this command. *Tubercular diseases* very frequent, and fatal at all stations except at Lagos. The *mortality from consumption and diseases of the lung* amount, on an average of four years, to over $17\frac{1}{2}$ per 1,000 at the Gambia.

VI. SAINT HELENA. — Mortality less. Admissions for venereal and dietic diseases increased. Intemperance less. Fevers of a typhoid character have almost disappeared since the adoption of a system of a frequent transmission of the troops, by turns, from the very unhealthy James' Town Barracks to more healthy, elevated localities.

VII. CAPE OF GOOD HOPE.—In the 11th regiment, the admissions from venereal amounted to 499, or 583 per 1,000 strength. There was, in the force, a reduction of diseases of the respiratory and circulatory systems. *Ophthalmia*, at places, very prevalent. *Intemperance* furnished 20 per 1,000 strength of the cases for admission. More than half of the *invaliding* has been for ocular and cardiac diseases, and rheumatism.

VIII. MAURITIUS.—The high ratio of mortality, about 44 per 1,000 strength, may be attributed to the prevalence of cholera; but the general sickness had considerably diminished. Venereal on the increase. Fevers occurred chiefly amongst those troops which had suffered from them previously in India and China. *Diarrhæa much below the average*, which is the more remarkable as it is generally greatly in excess in those years in which an epidemic of cholera occurs. Among the troops the *mortality from cholera* amounted to 1 in 2.64 cases; in the civil population, to 10.61 per 1,000. No cases occurred among the officers. Diseases of the respiratory system much decreased. Diseases of the stomach and the bowels increased. The chief cause of invaliding was pulmonary disease.

IX. CEYLON.—*White Troops*.—Admissions much less, particularly for diseases of the bowels; including cholera and fevers. Although cholera was epidemic in the population, the troops escaped. *Ophthalmia* twice as frequent as before. Intemperance on the increase, so were tubercular diseases largely. Fewer diseases of the digestive system.

Black Troops.—Admissions less; deaths much above the average, chiefly from miasmatic diseases. These troops escaped during an epidemic of small-pox. Fevers less prevalent. When cholera was epidemic, the black troops at Jaffna suffered severely from a malignant type, attributable to the insanitary condition of the huts for the married men, and to the foul condition of the latrines. The disease ceased when the huts were cleansed, and new latrines built. From the

filthy condition of these huts and their inhabitants, itch prevailed to a great extent. *Tubercular diseases* rare, in marked contrast to their prevalence among the black troops in the West Indies and West Africa. The amount of *invaliding among the white troops* has been unusually great; the proportion of rheumatism was the highest. The average *mortality* for the past three years, shows a very rapid *increase among the white troops, with the advance of age.*

X. THE AUSTRALIAN COLONIES.—AUSTRALIA AND TASMANIA.—Admissions fewer; *mortality higher* than before, amounting to 22 per 1,000, chiefly from *tubercular diseases*, which “have been nearly twice as prevalent, and thrice as fatal, as on the average of the three preceding years.” In spite of some allowances that may be made, this seems “to indicate that the climate of the Australian colonies is not well suited to persons having a tendency to these diseases.” At the same time there have been fewer diseases of the respiratory organs generally, only reaching one-fifth of the usual amount.

NEW ZEALAND.—Admissions and *deaths less.* Fevers only found in those troops which had contracted liability to them, in India. Ophthalmia more prevalent, owing, it was reported, to defective sanitation of camps and quarters. The surgeon of the 70th Regiment shows how miserably those who suffered most from this disease were hutted, and the good consequences of removal to tents. Diseases of the respiratory system steadily on the decrease. Invaliding was caused principally by rheumatism in Australia, and by nervous diseases in New Zealand.

XI. CHINA.—SOUTHERN CHINA.—*White Troops.*—Admissions less, being 1,782 per 1,000. Mortality more, 28·78 per 1,000, but still under the average of the three previous years. Reduction of sickness, chiefly from miasmatic and pulmonary diseases. *Diseases of nutrition and intemperance much more prevalent*, also accidents and violence. Reduction in fevers, dysentery, diarrhæa, ophthalmia. Cholera did not prevail.

Native Troops.—Sickness as last year. *Mortality* only a third of that in 1861. Reduction in all miasmatic diseases, except eruptive fevers and rheumatism. No case of disease of nutrition, so common last year; only one of diathetic disease, dropsy.

NORTH CHINA.—*White Troops.*—Mortality very great, ranging from 70 at Tientsin and Taku, to 163 per 1,000 at Shanghai; causes chiefly cholera, dysentery, diarrhæa, and small-pox. Of this disease, all the cases are reported to have had marks of vaccination but two, which bore marks of pre-

vious small-pox, and of these two one died. Remittent fevers common and fatal, from the localities being malarious; also continued fevers, from overcrowding and bad sanitation. Dysentery and diarrhæa also fatal, from bad sanitation and epidemic influence. Cholera cut off $\frac{1}{20}$ of the whole force during six months in which it prevailed. It attacked at the same time all classes, European and native, in most of the large cities in North China. "Between Shanghai and Soon-Kiang (40 miles), about $\frac{1}{8}$ of the population had died from cholera alone." Pulmonary diseases much fewer.

Native Troops (Asiatic).—The mortality (33 per 1,000) was caused chiefly by cholera, although the deaths by it amounted to only one-third of the proportion among the European troops. *Invaliding* of white troops has been chiefly for pulmonary, cardiac, and ocular diseases. A great increase of mortality with advance of age was shown, particularly in the cholera epidemic.

XII. INDIA.—*White Troops*.—Average strength, 63,713; with admissions to hospital, 110,584; deaths, 1,517, and of invalids, 119; making a total of deaths, 1,636. The admissions being slightly, and the deaths nearly $\frac{1}{3}$, under the proportion in 1861. The reduction of sickness most marked in Bengal, where the mortality has been $\frac{1}{3}$ below the average of the two preceding years. Mortality less in Bombay; slightly in excess in Madras. The illness chiefly from miasmatic diseases. In Bengal and Bombay much less venereal. Continued fevers much fewer. Dysentery and diarrhæa much less in Bombay and Madras. Cholera very much less in Bengal, only $\frac{1}{3}$ of that in 1861, and $\frac{1}{2}$ the average of two years, 1860-61. Ophthalmia less in all. *Intemperance on the increase* in all the presidencies. In Bombay more *scurvy*. Heat apoplexy gave more admissions and deaths.

BENGAL.—Cholera the chief cause of mortality, nearly $\frac{1}{3}$ of the whole; although less than before, it has been as fatal, the proportion being 1 death to 1.61 cases. On the appearance of cholera at any station, the troops were moved into camp, and moved constantly as long as cholera lasted among them; they only returned after it had quite left the station. The general sickness and mortality were highest in the Royal Artillery, and lowest in the cavalry, and appear to have been in excess among those troops which had passed the longest time in India.

MADRAS.—Mortality did not amount, where above the average at Bangalore and Madras, to 30 per 1,000. Cholera was epidemic only at Bellary and Kamptee. In Madras the greatest sickness and mortality were in the artillery, and the least in the cavalry.

BOMBAY.—At only two stations was cholera epidemic. Here sickness was highest in the artillery, mortality highest in the cavalry. At Neemud nearly half the deaths in the 106th Regiment were caused by cholera.

The number of *invalids* sent home from the three presidencies for discharge amounted to 28·17 per 1,000 strength. Principal causes, diseases of the digestive system, as chronic inflammation of liver, diseases of nutrition, arising chiefly from repeated attacks of fevers, and rheumatism. Of those from Bengal and Bombay, pulmonary disease was the chief cause; from Madras, rheumatism. “Cardiac and aortic disease, dysentery and hepatic disease, and eye diseases, also hold an important place among the disabilities.” The table at page 141 “shows a much more rapidly progressive increase of mortality with the advance of age than is usual in temperate climates, the mortality at the ages 35—39 being double that of the ages 20—24. The practical bearing of these results upon the question of the relief of regiments in India must be obvious.”

XIII. ON THE HEALTH OF TROOPS ON BOARD SHIP.—Numbers amount to 19,432 men. *Troops proceeding on foreign service* amounting to 8,120 men; deaths nine. More sickness than in 1861 in troops going to India, chiefly from venereal. Of seven deaths on this voyage, three were from typhoid fever. *Troops returning from foreign service*, 4,490; deaths, 69. Sickness and mortality in return from India and China greatly in excess in almost all diseases, chiefly miasmatic, venereal, digestive. Among 652 men of the 75th Regiment there were 499 cases treated, and 43 deaths. This gives an *annual ratio* of 2,332 cases, and 20,093 deaths per 1,000 strength. The fatal diseases were dysentery, diarrhœa, and cholera. Condition of ships reported satisfactory. Sickness attributed to the men's previous service and to the period of the year—the commencement of the unhealthy season—at which they were embarked.

XIV. SUMMARY.—In the whole army, at home and abroad, admissions into hospital, 11·65 per 1,000; deaths, 16·38 per 1,000; discharges by invaliding, 26·13 per 1,000; average sick time to each soldier, 18·16 days; average duration of cases in hospital, 17·84 days.

The appendix relates to the first report published by Government on the health of the French army, for France, Algeria, and Italy in 1862. In the British army a soldier, if unfit for duty by sickness, however trifling, is admitted into hospital. In the French, only the more severe cases; such cases as venereal, boils, skin diseases, are treated in the regimental infirmary, and in quarters. Also, nearly one-sixth of

the strength are absent from their corps, and it is only the deaths among the absent that are returned. Officers are included in the returns. From tables it appears that the cases of sickness in the French army have been two and a half times as numerous as in the British. Number of constantly non-effective from sickness, and the sick time to each soldier have been nearly identical, *period of treatment* being to the British as 9 to 19 $\frac{3}{4}$ days. But possibly the same case may be reported more than once. Relative *mortality*, 9·59 to 8·72 per 1,000, or 0·87 higher than the British. The mortality in our household brigade, and Royal Engineers, higher than in the corresponding corps (French); all the other branches of the service lower. Probably there were more men of advanced age in the British army; therefore any correction on this head would tell in our favour. We cannot tell the relative amount of such diseases as syphilis, &c., in the two armies. The French troops in Italy unhealthy; the probable cause chiefly the malarious and insanitary condition of Rome. Also in Algeria; but this may be due in great measure to the system of employing there punishment corps (*corps disciplinaires*).

1. *Sore Throat, its Nature, Varieties, and Treatment: including the Use of the Laryngoscope as an Aid to Diagnosis.* By M. PROSSER JAMES, M.D., Physician to the City and Metropolitan Dispensaries, &c. Pp. 155, 8vo. Churchill.
2. *On the Laryngoscope and its Clinical Application.* By T. J. WALKER, M.D., Surgeon to the Peterborough Infirmary, &c. Pp. 79. 8vo. London: Richards. 1864.

IN the preface to his work, Dr. James states that his object has not been to compile a systematic account of the diseases of the throat, but rather so to group and compare the several disorders as “to exhibit their mutual relationship, to facilitate diagnosis, and to promote right principles of pathology and treatment.” The book itself affords evident proof of the author’s endeavours to carry out the arrangement here indicated; and, on the whole, Dr. James has succeeded in producing a clear, concise, and useful description of throat-affections.

In the earlier portion of the book, a preliminary sketch of the whole subject is given, and, subsequently, more minute details of the various disorders are entered into separately.

In the introductory chapter, the author particularly directs attention to the close relation which exists between the skin

and the mucous membranes generally; this is a point which is of great importance in both the diagnosis and the treatment of many affections, although it was not fully recognized until the late Dr. Gregory insisted upon its value, in his lectures upon the Eruptive Fevers.

Writing upon the subject of sore throat in connection with the exanthemata, Dr. James suggests that the poison is often the same, but modified in its manifestations, in these fevers. "Perhaps," he says, "after all, there may be fewer fever poisons than has been conjectured. Is it possible that these exanthemata, so near to each other, are in essence but one, modified by the conditions under which it is developed?" Possible, doubtless, but improbable, so far as our present knowledge of disease enables us to state. The unity of disease has always found advocates, especially in connection with the subject of fever, but modern investigations run counter to this supposition.

The diagnosis of affections of the throat was, until recently, extremely difficult, owing to the fact that, being unable distinctly to view the diseased part, the practitioner was often obliged to treat the case principally on general symptoms. Now that the laryngoscope has been brought to such perfection, much of this obscurity and difficulty has been, and in every year will continue to be, obviated; so that the next generation of medical practitioners will find the way to treatment greatly smoothed by the additional facilities of diagnosis. The subsidiary portion of the title of Dr. James's book shows that he has not neglected to avail himself of the laryngoscope, although when it was written laryngoscopic science had not made the rapid progress which it has since done. The author states that for some years he has been in the habit of employing reflectors which magnify; in some cases this may be an advantage over the ordinary mirrors which represent the parts exhibited, of the natural size only.

In the treatment of many disorders of the throat, Dr. James gives a marked preference to aconite over other remedies; and, certainly, the cases which he appends, show a degree of success, attained by the administration of this drug, which makes it worthy of a trial. The preparation which he uses is the tincture, diluted sufficiently to prevent the local action which is produced upon the mouth and fauces when it is taken in the pure state. The dose recommended by the author is from one to three minims three or four times a day, or more often if requisite; the remedy is tasteless when it is diluted, and the addition of a little syrup will make it palatable. As aconite has a tendency to accumulate

in the system, the effects of the medicine must be carefully watched.

Under the head of tracheotomy, Dr. James suggests that this operation is often performed by our continental neighbours when it is unnecessary, and when other less severe measures might have led to the recovery of the patient. This appears to be a common opinion with English writers, but from what we have seen, we are inclined to dissent from it; and, in fact, we believe that it would be better in many cases if the operation were performed sooner, before the patient has fallen into a moribund condition.

Dr. Walker's little work, consisting chiefly of papers reprinted from the "British Medical Journal" and "Medical Times," contains a very sensible and useful description of the laryngoscope, and of the best method of employing this diagnostic aid.

The author has devised an important improvement for use in cases where it is necessary to have some accessory apparatus for the purpose of concentrating artificial light, when a minute examination of the larynx has to be made on a dull day. The ordinary means of concentration is by the aid of a concave reflector; in the place of this, Dr. Walker recommends a globe condenser. The globe, which is made of glass, is about 6 inches in diameter, and is filled with water, so as to constitute a powerful concentrating lens, when the rays of light, from a lamp, or other source of artificial light, are transmitted through it.

By the addition of a small mirror, placed opposite to the person whose throat is examined, a convenient form of apparatus for auto-laryngoscopy is obtained. The globe condenser, with the stand to which it is attached, and the rest of the apparatus required in its use, have the additional recommendation of being inexpensive, and little liable to get out of order.

On the Growth of the Jaws. By G. M. HUMPHRY, M.D., F.R.S. Cambridge: University Press. 1864.

IN this interesting physiological contribution, which gives the substance of a paper read before the Cambridge Philosophical Society, Dr. Humphry demonstrates that the enlargement of the jaw-bones is effected, and their shape given and preserved, by addition of tissue at some parts and its removal at others, there being little or no interstitial growth.

The lower jaw is elongated, according to this learned Professor of Anatomy, by gradual absorption of the fore part

of the coronoid and condyloid processes, and by gradual addition to the hinder part of those processes, besides at the angle and along the hinder edge of the jaw. The coronoid process, which is at first situated over the rudiments of the permanent molars, is shifted to a plane behind them, as the result of the gradual elongation which takes place.

To illustrate the correctness of his views, Dr. Humphry conducted some experiments by attaching loops of wire through these processes in the pig. In each instance, when the animal was killed at a subsequent period, the loop of the wire encircling the anterior or coronoid portion and edge was found projecting some distance beyond the coronoid edge, showing that the bone had receded in that situation; and the loop of the other wire, passed through the posterior or condyloid part, was found in such a position as showed that the bone had advanced in this direction, and to a greater extent than it had receded from the front.

In infancy the rami of the jaw are in a line with the alveoli; at a later period of life they diverge considerably, and a well-marked obtuse angle, in a horizontal plane, is formed between the alvolar arch and the posterior portion of the jaw. The widening of the jaw, going on in a ratio to the increasing width of the base of the skull, takes place chiefly behind the alvolar arch, in the ramus, and must be effected, as is shown by the author, by progressive absorption on the inner surface, and addition at the outer surface of the jaw. These changes will be better understood after a perusal of the pamphlet itself, which contains some illustrative diagrams.

MEDICAL SOCIETY OF LONDON.

Ordinary Meeting, October 17, 1864.

ROBERT GREENHALGH, M.D., President.

Mr. SPENCER WATSON exhibited an *Aneurism of Profunda of the Thigh*, taken from a lady, aged 39, unmarried, of emaciated cachetic aspect. She was seen in July last, and then complained of pain in the upper part of the left thigh. A pulsating tumour was found in Scarpa's triangle, extending beyond the outer margin of that space. There were slight cedema of the leg, and almost constant pain. The diagnosis laid between deep-seated abscess and aneurism. The patient died in the middle of September, of some disease of the lungs, probably acute tuberculosis. The *post-mortem* examination revealed the superficial femoral running over the tumour, which originated with the profunda artery. A tumour was found in the uterus, probably fibroid. Mr. Watson said that aneurism of the profunda femoris was extremely rare, and at all times difficult to diagnose.

Mr. BRYANT referred to a case of the kind at Guy's Hospital, of supposed aneurism of the femoral high up, which, at the *post-mortem* examina-

tion, was found to be an aneurism of the profunda, an inch below its origin. He exhibited it at the Pathological Society, and, the next morning, Mr. Erichsen drew his attention to another case. Mr. Bryant remarked that the diagnosis is extremely difficult.

The PRESIDENT suggested a section being made of the aneurism.

Mr. PETER MARSHALL observed, that a good many years ago he had a case of extensive aneurism of the profunda, which terminated life suddenly. The case was not placed upon record at the time.

Mr. WATSON (who had just made a section of the aneurism) said, the coagulum completely filled the sac, and it had undergone the process of cure.

The PRESIDENT exhibited a *Uterine Sound, with Indicator*, which he said was most convenient and useful. He had found it difficult to tell how far the ordinary sound passed into the uterus. To obviate this, he had one constructed like that exhibited, viz., an ordinary sound, with a ring at the end, which descended as the sound was pushed into the uterus. At the other end a stem protruded, which read off, on a graduated slide, the extent of its passage into the uterus. It could be readily cleaned, and even used as an ordinary sound as well.

Dr. ROUTH said, that Dr. Marion Sims had just mentioned to him that this instrument had been in use for eight years in America, showing that two minds had invented the same thing.

The PRESIDENT exhibited some *Uterine polypi*, which he had recently removed from the vagina. He remarked, it was most important to examine the vagina in vaginal hæmorrhage, for in all the three cases just brought forward, there was hæmorrhage. Each polypus had a small pedicle.

Dr. WILLIAMS, of Swansea, related briefly, *three curious cases of disease of the Lungs*, which had come under his observation recently. They were cases of Acute Tuberculosis of the lungs, affecting the bases. One was seen by Dr. Inman, who verified his diagnosis. The *symptoms* were:—In the first case, that of a Captain in the Army, sudden dyspnoea for three or four months, minute crepitation heard at the back of the chest like that of capillary bronchitis; then sudden consolidation. The apices of the lungs were sound. The autopsy showed deposit of tubercle through both bases; the heart was sound. 2nd Case.—Same series of symptoms, crepitation at both bases. There were all the evidences of true tubercular phthisis. The dyspnoea, in these two cases, was most extreme, and Dr. Williams had never seen anything like it. In the 3rd case, now under treatment, there is the same characteristic difficulty of breathing.

Dr. SYMES THOMPSON remarked, that Dr. Williams spoke truly as to the tuberculous condition of the lungs at the base, as one very rare, and not usually described in medical works. He had had one or two at the Brompton Hospital, and Dr. Andrew Clark had mentioned to him six or seven, where the symptoms had commenced a good deal like those of ordinary pneumonia.

Dr. GIBB referred to a case of a similar kind under his care at the Westminster Hospital a few weeks back, where the dyspnoea was most urgent and extreme, with minute crepitation at both bases. The patient had laryngeal symptoms as well, and the peculiar condition of the epiglottis which was swollen and erect, and of a crater-like form, was, he considered, almost pathognomonic of acute tuberculosis. At the *post-mortem* examination both bases were found solidified, with acute tuberculous deposit.

Dr. PALFREY thought that he had heard Dr. Addison at Guy's Hospital describe such cases as those of Dr. Williams.

Dr. LEARED said such cases were described by Dr. Stokes in his work, and that they were not new.

Dr. KIDD considered the dyspnoea to be the result of the influence of the disease on the remote terminations of the pneumogastric nerves.

Dr. GIBB asked Dr. Williams if there were any laryngeal symptoms in his cases, and in reply Dr. Williams stated that such symptoms are present in his third case, at present living.

Dr. GREENHALGH, the President, then read his *Opening Address*, embodying a large number of rare and interesting cases in obstetric practice and diseases of women, and illustrating some errors in diagnosis. (Dr. Greenhalgh's Address is printed separately at page 681 of the present number).

Dr. ROGERS added a contribution to the President's series, of two cases of normal pregnancy which had been mistaken for extra-uterine, one in private, the other in hospital, practice. Both were normal, and yet there were many doubtful symptoms; the walls of the abdomen and uterus were as thin as paper, and it was thought impossible that the children could be in the uterus, as they were so distinctly felt. He had had a case of supposed pregnancy sent up to him from the country, which proved to be a large polypus, which he removed from the uterus at the Samaritan Hospital.

Dr. WILLIAMS, of Swansea, had seen a case the other day similar to the case of polypus described by the President.

Dr. MARTIN, of Berlin, related a case, like one of the President's, of a substance in the vagina, mistaken for a polypus, which, however, differed in this respect, that the foreign body was a cork, and not a sponge; the foetus was so great that the disease simulated epithelioma.

Dr. MARION SIMS, of New York, observed that errors in diagnosis formed a very prolific theme, and the subject might be discussed for hours. The President's address, he said, was one of the best he had ever heard, from the number of practical facts it contained. The diagnosis of one of his cases of polypi would have been very difficult with a speculum, indeed no speculum was large enough for such a purpose. If the patient was placed on her knees, she would breathe easier, and the air would rush into the vagina and dilate it; the tumour could then be seen, by the passage of the atmospheric air around it. In that method of examination the facilities are very great. Our modern literature teemed with cases of hysterical deception, like some detailed by the President. A self-retaining catheter would detect those of distension of the bladder. He (Dr. Sims) related a case of deception occurring in Alabama of a supposed monstrosity in a negro woman, from whose vagina were drawn the bowels of a chicken; on another occasion a skinned rabbit was introduced into the vagina, by the same person, for the purpose of deception.

Dr. GIBB referred to the case described by the President, in which an ovarian cyst discharged its contents into the bowels, and the prominence of the belly did not subsequently subside. He had seen the patient in St. Bartholomew's Hospital, and the preparation afterwards. It was most instructive. The thickened walls of the tumour were adherent everywhere to the bowels, and were in consequence prevented from collapsing, on the escape of the purulent contents, and hence its cavity became filled with air, necessarily destroying the patient.

Dr. ROUTH, and Dr. PALFREY, each related a case in which a sponge had been introduced into the vagina, and had become lodged there, giving rise to great discomfort and pain to the patient, and rendering the diagnosis of the case very difficult.

Dr. EASTLAKE described a case of presentation of the funis, where the perforator was used, and a dead child was afterwards found besides the other, whose head had been perforated. He also referred to a case of bifid os occipitis, which led to an error in diagnosis.

The President then replied, and the Society adjourned.

THE MONTH.

THE INTRODUCTORY LECTURES.

As usual, the commencement of the Winter Session at the Medical Schools, brought together large audiences to hear the introductory addresses, with which it is customary to open the session. For some dozen gentlemen to have to go over the ground repeatedly trodden by those who had come before them, was no easy task; but the introductory lectures of this year showed no falling off in merit, as compared with those of previous years. Indeed, in some respects, there was a marked improvement. There was less "tall talk" (as our American cousins call it), and of the flowery self-laudatory language, which always conveys with it a strong suspicion that the lecturer speaks chiefly with a view to secure any waverers who have not yet decided upon a choice of a school. This year, the lecturers addressed themselves to their work with an earnestness which must have appeared almost marvellous to some of the grey-headed occupants of the front benches, who had heard the same principles enunciated in nearly similar language for the last twenty years, and upon whom the warmth of crowded rooms seemed to possess a soporific influence, which the utmost eloquence of the speakers failed to neutralize. One hospital, St. Bartholomew's, followed the very sensible practice of holding a dinner, at which former students and lecturers might mix together in unrestrained friendship, and the meeting proved so agreeable to all concerned, that not only would they mark the day with white chalk in their calendar (we had no intention of making a pun upon the name of the gentleman who gave the able introductory lecture, and who contributed greatly to the success of the evening through his exertions as Secretary), but would look forward with pleasurable anticipation to a similar *réunion* in 1865.

RECENT PROSECUTIONS OF QUACKS.

THE designing, unscrupulous knaves who have so long fattened upon the credulity and folly of a section of the public, must begin to feel very uneasy at the notoriety into which their swindling transactions have lately been brought; and we hope that, now public attention is fully directed to their nefarious practices, their system may receive a blow from which it cannot rally. Quackery is, of all things, the

one which can least encounter the effects of an exposure, and the more publicity is given to the manner in which dupes are swindled and bullied, the less likely are quacks to flourish. A case, brought before the Marylebone Police Court a few days since, exhibits in strong colours the detestable practices of the men who make a living by representing themselves as medical men, and, having got some hold upon their victims, proceed to rob them of their health, and to swindle them out of their money. One Henery, falsely styling himself Dr. Henery, possessing several *aliases*, and doing business at a so-called "Medical Institution," in Dorset-street, was summoned, at the instance of a gentleman (whose services in bringing the fellow to justice make amends for his temerity and folly in allowing himself to be deceived by Henery's specious promises), for an attempt at extortion. The charge was clearly proved, and the magistrate remanded the case for some additional evidence, requiring heavy bail, to the amount of £1,000 each, for Henery and an accomplice, which will have the desirable effect of preventing their escape from the punishment which they richly deserve.

In the course of the evidence it came out that, on the first occasion of the complainant's visiting "The Medical Institution," he was charged 11 guineas, being one for consultation and 10 guineas for ten bottles of medicine, which the "Dr." told him were very expensive. Here, for once, the "Dr." accidentally told what was the truth, for a subsequent analysis of this *very expensive* medicine proved that it consisted only of water, with a little colouring matter! This system of fleecing continued until over 80 guineas had been paid, after which, the patient, who, it need scarcely be said, got no better, discontinued his relations with "Dr. Henery." This, however, did not altogether suit the views of the latter, who, in conjunction with his accomplice, made desperate efforts to regain his hold upon his previous victim, and to extort more money from him by bringing a fictitious claim of 150*l.* against him, and threatening to come down into the neighbourhood where the gentleman resided, and expose his "filthy case" to every one. Fortunately neither this nor similar threats, such as that of reporting the matter at the War Office (the victim being a Captain in the Army), failed to produce the anticipated results, and the affair has now assumed a very unpleasant aspect for the proprietors of the "Medical Institution." Before concluding our notice of this case, we may refer to the high-sounding names and titles which quacks resort to for the purpose of gulling the public. In a journal laying before us, we find the advertisement of a book on "Nervous Debility, Loss of Memory, Lassitude, Lowness of Spirits,"

and a host of other bad symptoms, for which a promise of immediate relief is held out by the author, "Dr. Henery." The advertisement further contains the following sham extract:—"This is a rare work, the embodied experience of an able practitioner, a book to be read and re-read by those requiring sound medical treatment.—*Medical Review*." Of course, no such notice ever appeared in that periodical. In the same weekly journal from which this advertisement is quoted, we find numerous other announcements of the same class:—"Dr. Watson, of the Lock Hospital, F.R.A.S., Member of the College of Physicians and Surgeons," (not in the "Medical Register!") advertises a work on the "Self Cure of Nervous and Physical Debility, Spermatorrhœa, Wasting of the Vital Fluids, and Withering of the Nervous Tissues," &c., with a false panegyric of the pamphlet, supposed to be copied from the "Hospital Gazette." Another advertiser, "W. Hill, Esq., M.A." puffs off his pamphlet on "Self Cure," by a quotation from the "Medical Record." No such journal as the "Medical Record" exists, but then the quotation is as true as the rest of the story; so, what matters it? The weekly paper from which these advertisements have been selected (the "Oxford University Herald,") is one of good standing and high respectability, with a large circulation amongst the members of one of the universities. It does not unfortunately stand alone in the readiness with which it indirectly aids the quack fraternity in their attempts to entrap the unwary, for, with the exception of the "Times," and a few other journals, the general press of this country teems with empirical advertisements, as disgusting as they are false.

MEDICAL INTELLIGENCE.

BRITISH ARMY MEDICAL REPORTS.—The blue-book, containing these interesting reports for the year 1862, has only recently been published. As we give elsewhere an abstract of a portion of the contents, it is unnecessary to make further remarks here than a passing reference to the value of these reports, in showing the special effects of climate upon the English constitution, and the general effects of sanitary management upon the appearance and fatality of disease.

UNIVERSITY OF DURHAM.—Mr. F. J. Higgs, of Twyford, Leicestershire, is, this year, the successful candidate for the vacant medical scholarship of this university.

MEDICAL SOCIETY OF LONDON.—It has been determined to hold the meetings of this Society bi-monthly, instead of weekly. The change is a very important one for the interests

of the Society, and the numerous attendance of Fellows and Visitors at the opening-meeting on October 17th, gave promise of a prosperous and useful session.

UNIVERSITY OF CAMBRIDGE.—Dr. Paget (Caius), Dr. Dickenson (Caius), Mr. Lestourgeon (Trinity), and Dr. Latham (Downing), have been appointed examiners in medicine; Dr. Humphry (Downing), and Mr. Lestourgeon (Trinity), examiners in surgery. Dr. Drosier (Caius), has been appointed deputy professor of anatomy, on the nomination of Professor Clark.

THE HUNTERIAN ORATION.—Professor Partridge, of King's College, has consented to deliver the biennial oration in memory of Hunter in February next, at the Royal College of Surgeons.

BETHLEHEM HOSPITAL.—Although the question respecting the site of Bethlehem Hospital seems to have lately fallen into abeyance, we may mention that the Charity Commissioners are again proceeding with the inquiry. Mr. Martin, the Inspector of Charities, is taking evidence, and we understand that the whole subject will be brought before Parliament next session.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN.—In consequence of a sudden disagreement between one of the staff, Mr. Milton, and his colleagues, the latter have sent in their resignations to the Managing Committee. We understand, however, that it is intended to form a similar institution elsewhere at an early date, so that the course of Clinical Lectures which has been announced will be only temporarily discontinued.

MIDWIFERY BELT.—A very useful substitute for the round towel, and other contrivances hitherto in use, after delivery, was exhibited at the last meeting of the Obstetrical Society, by Dr. Eastlake. The belt, which is manufactured by Salmon, of Wigmore-street, can be readily applied, without disturbing the patient, and is easily fastened. It is made of a washing material, and possesses the combined advantages of suitableness and cheapness.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—We are glad to see, by the ninth Annual Report, just issued, that this Society, the meetings of which are held at Greenwich, is flourishing, notwithstanding the attractions of numerous societies in the metropolis. A considerable increase of the number of members has occurred during the past year, and the papers which have been read at the monthly meetings have been of an interesting character.

REGISTRATION OF STUDENTS.—The annual registration of students pursuing their studies at the eleven Metropolitan

Schools, has just been concluded at the Royal Colleges of Physicians and Surgeons, and at Apothecaries' Hall, and it is stated that there is some falling off in the gross number, and that at only three schools is there a slight increase over last year.

METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At a meeting of this Association, held on the 5th inst., Dr. Robert Druitt was elected President, in the room of the late Dr. R. Dundas Thomson.

THE NEW STAFFORD LUNATIC ASYLUM.—This building is erected at Burntwood, three miles from Lichfield, and is intended for the reception of 500 patients. The cost at present amounts to £35,000. The addition of another wing to complete the design will raise the cost of the whole building to £45,500.

LUNACY IN NEW SOUTH WALES.—The following proportions of lunatics to the population are given in the *South Australian Register*:—England and Wales, 1 in 557; Ireland, 1 in 659; Scotland, 1 in 767; France, 1 in 795; Rhenish Provinces, 1 in 666; New York, 1 in 702; Norway, 1 in 550; whilst in New South Wales it is stated to be, according to the public returns, 1 in 380.

MUNIFICENT BEQUEST.—Miss Clements, formerly of Liverpool, has left the liberal bequest of £30,000 to be equally divided between several Liverpool charitable institutions.

DEATH OF BARON HEURTELOUP.—This well known lithotritist expired on October the 4th, at Paris, at the age of 71.

THE PRIZE OF £2,000, IN PARIS.—M. Dumas, the eminent Professor of Chemistry, has just presented a report to the Emperor of the French on the above prize. The latter was founded by Napoleon III, in 1852, as a reward to the person who, every five years, shall have introduced the greatest improvement in the application of electricity. The report, which is of considerable length, presents a review of the different ingenious applications of electricity which have of late been carried out, and concludes that M. Kuhmkorff, of Paris, has deserved the prize.

COMPULSORY VACCINATION.—At the last meeting of the Whitehaven Poor Law Board, it was resolved that, in order to secure proper attention to the subject of vaccination, special quarterly meetings of the guardians be held to see that the regulations of the Board are duly carried out.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the annual meeting of the above College, held on 18th October, the following officers were elected for the ensuing year:—*President*, Thomas E. Beatty, M.D.; *Vice-President*, George Johnston, M.D.; *Censors*, G. Johnston, M.D., H. Ken-

ned, M.D., H. Freke, M.D., and R. Lyons, M.D.; *Treasurer*, Henry Law Dwyer, M.D.; *Registrar*, Lombe Atthill, M.D.; *Librarian*, George Alexander Kennedy, M.D.; *Professor of Midwifery*, Edward B. Sinclair, M.D.; *Professor of Medical Jurisprudence*, Robert Travers, M.D.; *Examiners in Midwifery*, Benjamin G. Guinness, M.D., and W. B. Jennings, M.D.; *Representative on the General Medical Council*, Aquilla Smith, M.D.

PROFESSOR OWEN AT BIRMINGHAM.—This gentleman recently delivered the second lecture of his course "On the Classification, Geographical Distribution, and Geological Relations of the Class Mammalia," in the Temperance Hall of the above town. He stated, that the discovery of the existence of a species of the mammalian quadruped in the oolitic strata was very interesting, and gave the following curious illustration:—There was an old quarry near Oxford which had yielded many interesting geological specimens. One day the old quarryman brought a small jaw, and on handing it to Dr. Buckland, said, "I think, Sir, I've got the jaw of the rat that was drowned in the deluge." (Laughter.) The Dean could scarcely believe the discovery, and in 1815, when Baron Cuvier visited England, he showed it to him, who at once stated that it belonged to an animal of the mammalian species, and was nearly allied to an opossum. The Baron, however, would not believe that it came from the oolitic strata, until he had received a report from a gentleman whom he specially commissioned to come over to England and make an examination, and who confirmed Dr. Buckland's report. To give his hearers some idea of the age when the little creature lived, he (Professor Owen) might tell them that all their downs of chalk—their grand white chalk cliffs, from which Albion obtained her name—had been circulating in living vessels of living animals, subsequently to the time when that little animal had lived and died.

THE LIVERPOOL NEW FEVER HOSPITAL, in connexion with the Liverpool workhouse, has just been opened for the reception of patients. It contains eight wards, each capable of accommodating twenty patients. The space allotted to each patient is 1,100 cubic feet. The total cost has been about £6,500.

WARWICK COUNTY LUNATIC ASYLUM.—An addition to this asylum has been built, and is ready for occupation. Forty additional female patients can now be received.

DEATH FROM CHLOROFORM.—An inquest has been held at the Bath United Hospital on the body of John Downing, aged 15. Mr. R. T. Gore, surgeon of the hospital, said that the boy was admitted with a crippled leg, which no treatment

could benefit. Amputation was resolved on, and on examination of the patient, made especially with reference to the heart's action, there appeared nothing to forbid the use of chloroform. The operation was successfully performed, but signs of failing circulation appeared, and death ensued in about ten minutes. Verdict: Died from the administration of chloroform through misadventure.

EPIDEMIC IN INDIA.—The epidemic fever which has committed such tremendous ravages in Bengal during the last year or two has re-appeared. As before, it is almost depopulating villages in the Hooghly district. We have heard of one instance in which hundreds of the natives died in a few days. Medical assistance has been supplied from Hooghly, but it appears almost entirely unavailing.

THE METROPOLITAN SCHOOL OF DENTAL SCIENCE was opened for the session on October 10th. Mr. Fuller gave an able and eloquent epitome of the progress and development of the dental art and science, in this and other countries.

THE LATE PROFESSOR QUEKETT.—A handsome polished granite tomb, with a suitable inscription, has recently been erected to the memory of Professor Quekett, within the churchyard of Pangbourn, in Berkshire, where he died in 1861, while residing there for the benefit of his health.

DR. BRADY, M.P.—It is stated that owing to the death of Mr. Henry Rayner, of the Isle of Ely, the daughters of Dr. Brady, M.P. for Leitrim, have inherited a fortune of upwards of £1,000,000.

YELLOW FEVER AT BERMUDA.—The *Montreal Gazette* says: "We regret to learn that seven of the military surgeons who recently left the North American Provinces for Bermuda, were at last accounts sick with the yellow fever. Drs. Ewell and Mellery are dead, and Dr. Lloyd not expected to recover." The *Montreal Herald* says:—"Captain Lockhart, of the Royal Engineers, was also dead of the fever; and several officers of the Queen's Royals, Dr. Harrison, of the Royal Artillery, and others, have also fallen victims to the disease." Later reports state that seven surgeons have died of fever.

HIPPOPHAGIC BANQUET.—The following is the invitation issued to the members of the Congress at Lyons:—"The use of horse-flesh for food is an immense benefit to health and public fortune. Adopting it in France, we should introduce 40,000,000 kilos (a kilo is about 2 lbs.) of flesh—as good as beef—more succulent than pork, and a third of the price of other butcher's meat. But is the taste of horse agreeable? The Hippophagi say: 'Yes,' their adversaries 'No!' because they have not yet acquired the taste. MM. the members of the Congress are earnestly requested to give

the experience of their tried palates, in order to do away with this prejudice, and to favour us with their company at this great hippophagic demonstration. The banquet will take place at the restaurant 'Neyret.' A *menu* of twelve dishes will be prepared for the guests. There are only 120 tickets. Dr. Munaret Quivogue, Veterinary Surgeon, Promoter of the Festival."

PRESENTATION TO DR. EWART.—A public dinner has recently been given at Middleton-in-Teasdale to Dr. Ewart, on his leaving that place after a residence of seventeen years. The chairman, the Rev. F. W. Robertson, on behalf of the meeting, presented to Dr. Ewart a handsome gold watch and chain. The watch bore a suitable inscription.

MEDICAL CANDIDATE FOR PARLIAMENTARY HONOURS. — Mr. Mitchell Henry, late Surgeon to the Middlesex Hospital, is a candidate for the representation of the borough of Woodstock, in the Liberal interest. He is a gentleman well qualified for the honour which he seeks, and if he is elected, as we hope that he will be, he will be a desirable accession to the House of Commons, where his father, the late Mr. Alexander Henry, formerly occupied a seat as Member for East Lancashire.

MEDICAL PROVIDENT FUND.—The first meeting of the Board of Directors of this fund was held at the Freemasons' Tavern, on October 20th, Dr. B. W. Richardson, in the chair. The movement, which gave rise to the formation of this fund, originated with some members of the British Medical Association, from which the Directors have been exclusively chosen. As a resolution to admit members of the profession generally was moved by Mr. Carter, of Stroud, and carried, it is probable that the institution will now be placed upon a firmer basis, and have a greater amount of support than it has hitherto received at the hands of the profession. To have persisted in limiting the admission to members of the Association alone, would have been a suicidal course.

THE MEDICAL ACT.—A meeting of the English Branch of the Medical Council has been held, for the purpose of considering the best manner of amending the Medical Act, so as to render it less useless than it at present is for the suppression of illegal medical practice, and the general advancement of the interests of the profession; and, as a result of their deliberations, it is very probable that steps will be taken to introduce a supplementary Act for the Amendment of the Medical Act of 1858, during the next parliamentary session. The appointment of a salaried prosecutor, to act under the directions of the Medical Council, seems to us the only effectual way of dealing with illegal practitioners.

PASS-LISTS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a general meeting of the Fellows held on October 19th, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the Science and Practice of Medicine, Surgery, and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—Barker, William Lewington, Hungerford; Barrington, Nicholas William, P. and O. Co.'s Service; Belcher, Joseph Silverthorne, M.D. St. Andrew's, New-road, Wellclose-square; Burman, William Maxwell, Wath-upon-Dearne; Chippendale, Walter, M.D. St. Andrew's, Palermo, Sicily; Colborne, Anthony Charles, Tachbrook-street, Pimlico; Eames, John Davey, Bourton-on-the-Water; Ferguson, Frederick Stuart, M.D. Edin., Bolton; Gray, John Temperley, Portland-terrace, Dalston-lane; Hodge, Benjamin Terry, Sidmouth; Lattey, James, St. George's Hospital; Leigh, Thomas, St. George's Hospital; Merry, Robert Rosier, Chelmsford; Oliphant, John, M.D. Edin., Alfred-street, Bedford-square; Phillips, John Jones, Guy's Hospital; Puzey, Chauncy, Guy's Hospital; Schmid, Carl Theodor, M.D. Tubingen, Edwards-square, Kensington; Williams, John David, Bala, North Wales.

The following gentlemen were reported by the Examiners to have passed the primary professional examination:—Bradshawe, Paris, King's College; Hoffmeister, William, University College; Nowell, Richard Bottomley, Guy's Hospital; Renshaw, William Alfred, Manchester; Rogers, Charles Edward Heron, Middlesex Hospital; Swindale, John, Middlesex Hospital; Tindall, Alexander McIvor, St. Bartholomew's Hospital; Webb, John Holden, St. Mary's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—*The Fellowship*.—The following Members of the College were admitted Fellows at a meeting of the Council on October 13th: Evans, Benjamin, Brixton; Kershaw, William Wayland, Kingston-on-Thames. *The Midwifery Licence*.—The following gentlemen, previously members of the College, were admitted Licentiates in Midwifery, on October 19th: Bailey, William Tipton, Staffordshire; Browne, Edgar Athelstane, Notting-hill; Fairbank, Thomas, Theberton-street, Islington; Jones, Alfred Orlando, Milner-square; Langworthy, George Vincent, Modbury, Devon; Lawrence, Henry Cripps, Kingston-on-Thames; Owen, Robert Edward, Beaumaris; Pearless, Charles Durrant, East Grinstead; Powdrell, John, Farndon, near Chester; Thompson, William Allin, Oxford; Ward, Martindale Cowslade, Markham-square; Wills, Charles James, Stockwell; Yates, William, Richmond.

APOTHECARIES' HALL, LONDON.—The following gentlemen were admitted Licentiates on the undermentioned dates. September 29th:—Birt, Joseph, Grove House, Leamington; Bush, Henry John Ryder, Warwick-street, Regent-square; Fowler, George, jun., Newington-terrace, Kennington-park; Metcalfe, Fenwick, Inglethorpe Hall, Wisbeach; Owen, David Charles Lloyd, Smethwick, Birmingham; Phillips, George Richard Turner, Leinster-square, Hyde-yark; Ryder, Henry Thomas, Upper Fitzroy-street, W. On the same day, the following gentleman passed his first examination:—Rogers, Charles E. H., Westmeon, Petersfield. October 6th:—Bell, Cyril William Bowdler, Valetta, Malta; Davies, Herbert, University College; Dodd, Edward, North Stoke, Oxon; Fairbank, Thomas, Islington; Powell, John, Chichester, Sussex; Power William Henry, St. Bartholomew's Hospital; Smallman, Joseph Clement Bruce, Willingham, Gainsborough. The following gentlemen also on the same day passed their first

examination:—Cass, William Cunningham, University College; Gill, George, Liverpool Royal Infirmary; Hoffmeister, William, University College; Tindall, Alexander McIvor, St. Bartholomew's Hospital. October 13th:—Carreg, Griffith Llewellyn, Birmingham; Herbert, Henry Carden, London; Pyle, Charles John, Amesbury, Wilts; Smith, John Ablewhite, Louth, Lincolnshire; Worger, Thomas Hewlett, Hospital, Canterbury. First Examination:—Leigh, Thomas Drake, Liverpool Royal Infirmary. October 20th:—Dawson, John, London Hospital; Jones, George, Goswell-road, E.C.; Locking, Benjamin, Coltman-street, Hull; Olive, George, Bourne, Lincolnshire; Ward, Martindale Cowslade, Markham-square, S.W. As an Assistant:—Smith, William John, Northampton.

VACANCIES.

BATH UNITED HOSPITAL.—For a Resident Physician's Assistant and Apothecary. Candidates must hold College of Surgeons' and Hall or College of Physicians' diploma. Salary, £100 per annum, with board and lodging. Applications to be sent in before November 9th. Election on December 5th.

LOCK HOSPITAL, WESTBOURNE GREEN, W.—For a House Surgeon. Full particulars may be obtained of the Secretary.

HALIFAX INFIRMARY.—For a House Surgeon. Salary, £60 per annum, with gradual annual increase, board and lodging. Election on November 2nd.

COUNTY LUNATIC ASYLUM, LANCASTER.—For a Junior House Surgeon. Salary, £100 per annum, with gradual increase up to £130, board and lodging. Applications to be made to the Superintendent.

DERBYSHIRE GENERAL INFIRMARY.—For a House Surgeon. Salary, £80, with board and apartments; increase to £100. Testimonials, &c., to be forwarded before November 7th.

BOURNEMOUTH SANATORIUM FOR DISEASES OF THE CHEST.—For Resident Medical Officer. Salary Fifty Guineas per annum, with board and residence. Testimonials to be forwarded to the Chairman of the Sub-Committee, Sanatorium, Bournemouth, Hants.

LONDON SURGICAL HOME FOR DISEASES OF WOMEN.—For a House Surgeon. Salary, £50 per annum. Applications to be sent in before November 7th.

COUNTY LUNATIC ASYLUM, STAFFORD.—For an Assistant Medical Officer. Salary £100 per annum, with board and residence. Applications to be addressed to Dr. Bower, the Superintendent.

STOURBRIDGE DISPENSARY.—For a House Surgeon. Salary £120, with furnished rooms. Applications to be sent in before November 12th. Election on November 21st.

KENT AND CANTERBURY HOSPITAL.—For a Physician. Testimonials to be sent in on November 3rd. Election on following day. Candidates must be Graduates in Medicine of a British University, or Fellows or Members of the London College of Physicians.

APPOINTMENTS.

ALLEN, J. W., Esq.—Surgeon to the St. John's Wood Provident Dispensary.

ALLINGHAM, J. H., Esq.—Dental Surgeon to the London City Mission.

BAKER, S. J., Esq.—Surgeon to the Abingdon Dispensary.

BARTLETT, J. J. H., Esq.—Resident Medical Officer to the Kensington Dispensary.

BODILLY, J. B., Esq.—Medical Officer for the Harrold District of the Bedford Union.

BRICKWELD, H., Esq.—Medical Officer for the Warboys District of the St. Ive's Union, Huntingdonshire.

BUTT, W. F., Esq.—Surgeon Assistant to the St. Pancras Union Workhouse.

CLARK, F. E., Esq.—Surgeon to the Royal Infirmary, Bristol.

CORLEY, A. H., M.D.—Lecturer on Descriptive and Surgical Anatomy at the Carmichael Medical School, Dublin.

DAY, E. E., M.R.C.P.—Physician-Accoucheur to the Farringdon Dispensary and Lying-In Charity.

DEMPSEY, W. C., Esq.—Medical Officer for No. 2 District of the Ongar Union, Essex.

EATON, J., Esq.—Medical Officer for the Farnfield District of the Southwell Union, Notts.

FENWICK, R., Esq.—Surgeon to the St. Peter's Workhouse, Bristol.

GRUBB, R. T., Esq.—House-Surgeon to the London Hospital.

HARRIS, G. S. D., Esq.—Medical Officer for the Leighton Buzzard Union.

HARRISON, R., Esq.—Medical Officer for the Ambleside District of the Kendal Union, Westmoreland.

HEADLAND, F. W., M.D.—Lecturer on Materia Medica and Therapeutics, at Charing Cross Hospital Medical School.

HILLS, R., Esq.—Medical Officer for the Conisborough District of the Doncaster Union.

HINDS, J., Esq.—Medical Tutor and Demonstrator of Anatomy at Queen's College, Birmingham.

HODGES, F. H., Esq.—Assistant House-Surgeon at the Cheltenham General Hospital.

JONES, EVAN, Esq.—Surgeon to the Aberdeen Iron Works.

KNIGHT, C. F., Esq.—Medical Officer for the Swalcliffe District of the Banbury Union.

KNOTT, O'MALLEY, Esq.—Medical Officer for the Castlebar District of the Castlebar Union, co. Mayo.

MAPLESON, H., Esq.—Medical Officer to the St. James's and St. Ann's General Dispensary, Soho.

MASSINGHAM, J. E., Esq.—Medical Officer for No. 1 District, Bethnal Green.

MUSHET, W. B., M.B.—Medical Officer to the Jews' Hospital, Norwood.

NICHOLSON, J. M., M.D.—Medical Officer for the new Workhouse, Holbeck, Yorkshire.

NORRIS, R., M.D.—Lecturer on Physiology, at Queen's College, Birmingham.

ORR, G., M.D.—Medical Officer for the Ballylesson District of the Lisburn Union, co. Down, Ireland.

PIGG, T., M.D.—Surgeon to the Ardwick and Ancoats Dispensary, Manchester.

PRANCE, C. B., M.D.—Senior Physician to Plymouth Public Dispensary.

RITCHIE, C., M.D.—President of the Faculty of Physicians and Surgeons, Glasgow.

ROBERTS, J., Esq.—Resident Surgeon to St. Pancras Workhouse and Infirmary.

SAUL, W., M.D.—Medical Officer to the South District of the St. Pancras Union.

SHORTO, W. B., Esq.—House-Surgeon to the Royal South Hants Infirmary, Southampton.

SMITH, W., Esq.—Resident Surgeon to the Birmingham Lying-In Hospital.

SNELL, E., Esq.—Resident Medical Officer to the Isle of Man General Hospital.

TAYLOR, S. T., Esq.—Resident Medical Officer to the Norwich Public Dispensary.

WILTSHIRE, A., M.D.—Physician to the Islington Dispensary.

WITHERBY, W. H., M.R.C.P.—Physician to the Islington Dispensary.

WOOLLEY, T. S., Esq.—Medical Officer for the District No. 6 of the Basford Union, Notts.

WRIGHT, M., Esq.—Medical Officer for the No. 2 District, St. Mary's, Newington, Surrey.

DEATHS.

BLACKWOOD, PINKSTAN, Esq., formerly Surgeon to the Royal North Devon Militia, at Middleton-Tyas, Yorkshire, on October 5, aged 87.

CRAWFORD, WILLIAM, M.D., at Stuart-street, Piershill, on October 15.

JEFFERY, J., Esq., of Northampton, at Trinity-square, Southwark, on September 27.

HALFORD, EDWARD, Esq., of the City-road, E.C., on October 12, aged 45.

HODGES, E., M.D., late of Bath, at Kensington Park-road, Bayswater, on October 2, aged 54.

LOVELL, C. H., M.D., of the Green, Tottenham, on October 5, aged 74.

MACDOUGALL, J., Esq., of Old Kilpatrick, Dumbartonshire, on October 5.

MACLEAN, CHARLES, M.D., late Army Inspector-General of Hospitals, at Leinster Place, Rathmines, on October 4.

MACLEAN, SAMUEL, F.R.C.S., at 68, Wimpole-street, on October 18, aged 46.

ROBERTSON, ARCHIBALD, M.D., F.R.S., at the West Mall, Clifton, on October 19, aged 74. The deceased was for many years Senior Physician to the General Infirmary, Northampton.

ROSCOE, F., M.D., of Sussex-street, Warwick-square, at Humberstone, Leicestershire, on October 3, aged 71.

RUSSELL, W., M.D., at Lausanne, Switzerland, on October 2, aged 23.

SALTER, R. F., Esq., late Assistant-Surgeon to the "Dreadnought" Hospital Ship, at Richmond-road, Bayswater, on October 2, aged 53.

SHELLOW, DANIEL, Esq., late of Lutterworth, at Wolverhampton, on September 28, aged 34.

SILVESTER, THOMAS, Esq., at the Beeches, West Bromwich, on September 25, aged 76.

THOMAS, MORGAN, Inspector-General of Hospitals, at 2, Queen's-terrace, Woolwich Common, on October 22, aged 81.

VOST, J., M.D., late of Kelso, at Queen-street, Stirling, on October 8.

WALKER, R., Esq., of Westfield, Cupas, Fifeshire, on October 5.

WATERWORTH, CHARLES ALBERT, M.D., at Newport, Isle of Wight, on October 3, aged 24.

Errata.—In our last number, the following mistakes occurred in Mr. Sprague's paper, through the inability of the author, from illness, to correct the proof.

Page 634, line 6, *for* Acid. Sulph. dil. ʒj, *read* ʒj; and

„ „ line 7, *for* Magnes. Sulph. Exsicc. ʒiv and ʒvi, *read* ʒiv and ʒvi.

Page 635, line 1, *for* ʒviiij, *read* ʒviii.

THE MEDICAL MIRROR.

DECEMBER, 1864.

ORIGINAL COMMUNICATIONS.

On Throat Cough. By GEORGE DUNCAN GIBB, M.D., Assistant-Physician and Lecturer on Forensic Medicine, Westminster Hospital.

THE title given to the present essay might be objected to as a somewhat anomalous one; indeed, at first sight, it seems quite problematical how a cough could come from the throat; nevertheless as cough does occur in both throat and laryngeal affections without any manifestation of actual disease in the chest, unless purely from sympathy, the expression of throat cough has been selected as a suitable one under such circumstances, to distinguish it from any other cough proceeding from disease of the lungs or bronchial tubes. As the modified states of the pulmonary cough occurring in chest disease have been considered by writers on auscultation (especially Dr. Walshe) under the divisions of bronchial cough, cavernous cough, and amphoric cough, so are we justified, it appears to me, in speaking of tracheal cough, laryngeal, and epiglottic or throat cough, according to the seat of the disease more particularly giving rise to it. There is an excellent precedent for this, first established by myself, in relation to the great inconvenience of difficulty in swallowing, known as dysphagia, which, in my writings, has been divided according to its situation and the condition which produces it.* And this is in reality a matter of great importance in estimating our diagnosis, oftentimes in affections of the utmost moment, when the prognosis is waited for with the greatest anxiety.

It is hoped, therefore, that henceforth *throat cough* will be

* See the second edition of my work, "On Diseases of the Throat,"—chapter on Dysphagia.

accepted as an actual entity, whether looked upon as a symptom merely, or as an independent affection. Indeed as the phonetic sonorousness of cough cannot occur without some contraction of the glottis during the expiratory effort, its tone being necessarily modified by the particular form of lung disease giving rise to it, one may correctly assert that the larynx has much to do with cough. This is not invalidated by the occurrence of a variety of cough in cases of artificial tracheal fistulæ.

As throat cough has presented itself to my notice under various conditions, as regards the causes giving rise to it, and as relates to the precise seat of these latter, it will be expedient to divide the subject, for the purposes of distinctive diagnosis, into three classes, viz.—1st, *Throat cough* in its distinctive sense, wherein the cough originates from causes existing in some part of the throat wholly above the larynx; 2nd, *Laryngeal* or *croupy cough*, produced by some cause, for the most part confined to the larynx; and 3rd, *Tracheal cough*, wherein some affection of the tube of the trachea gives rise to the cough. There may be modifications of these, or a mixture of two of them, or perhaps of all three in certain instances. The point of importance, however, for the physician is to determine whether the cough is induced by lung disease or from disease in some part of the throat or windpipe. If the latter, and the cause is clearly recognisable, the treatment is widely different, and in many cases the cough, although existing for many years, and supposed to be of a phthisical nature, is dispelled as it were by magic on healing or removing the local condition giving rise to it. To the well informed practitioner not versed in the use of the laryngoscope this may appear very improbable, especially in cases of tracheal cough, but a careful investigation of the subject will in time convert those who may be sceptical at the present moment of the powers of revelation which this useful instrument furnishes to inspect the hidden secrets of parts heretofore inaccessible to ordinary vision. It is scarcely possible to mistake a well marked case of true thoracic disease, yet cases do present themselves in practice which so strongly simulate such that it behoves the practitioner to call all the resources of our art to his aid, to assist him in thoroughly making out the true seat of the malady. This will become apparent to some extent in the few cases selected as examples, and narrated further on. Many instances have occurred to me of throat or laryngeal disease associated with more or less cough, in which the morbid influence has extended to the chest, and the general malady has then become so complicated that our efforts to cure are at best but palliative. As throat affections are now

receiving more attention than they did formerly, from the numerous and valued appliances at our command for inspection and diagnosis, it is to be hoped that they will become more curable, from the fact of their being seen at an earlier period, when the treatment is comparatively simple. Throat cough in some one of its forms is so frequent a concomitant, and sometimes so masks the true seat of the disease, that I may be excused for drawing particular attention to it. It will be seen from what is here stated, that what is called as "*only a throat cough*" possesses more significance than is usually attached to it. From being at first a mere trifle, it becomes magnified into something of greater importance; this applies especially to the larynx and trachea.

We will now briefly narrate the causes which give rise to each form of cough, firstly taking those of the true *throat cough*, from their originating in some part of the throat properly so called. These are:—

Ulcers at the base of the tongue in the valleculæ or fossæ there situated, anterior to the base of the free portion of the epiglottis. These may extend to the lingual surface of the epiglottis, or to the folds of membrane on either side, and keep up an incessant hacking cough, as if the result of breaking down of tubercle in the lung, when no physical sign of such a disease is present. This condition is occasionally observed in follicular disease of the throat.

Pendency of the epiglottis, accompanied by chronic inflammation and even ulceration of its laryngeal surface, with extreme irritability of the opposed surfaces of the cartilage and its proper folds, not only gives rise to an irritable and distressing cough, but at times a feeling of threatened suffocation.

Extensive ulceration of the epiglottis with solution of its substance, proceeding to the destruction of the whole or greater part of the free portion, co-existing most generally with ulceration of the immediately contiguous structures, *e.g.*, the aryteno-epiglottidean folds, arytenoid cartilages, and interior of the larynx generally, are fertile sources of cough. The disease then becomes converted into phthisis laryngea, and the cough, which was at first from the throat, becomes laryngeal, and finally thoracic, for the lungs are ultimately involved.

Follicular disease of the fauces and larynx, with its attendant phenomena, occasionally combined with ulceration of the follicles, or enlargement, and pouring out mucus, gives rise to irritation, cough, and constant desire of expulsion of phlegm.

Lodgment of foreign bodies, such as crumbs, raisin stalks,

nutshells, fish bones, &c., in the fossæ between the lateral boundaries of the larynx and the walls of the pharynx, are also causes, the floor of the cavity being formed by the horn of the hyoid bone. Ulceration is occasionally present here, and now and then the fossæ of one or both sides become hypertrophied, and form sacs large enough to hold a teaspoonful of fluid, giving rise at times to a choking cough. The other conditions, also, keep up an irritating cough, simulating an attack of bronchitis, which is quickly relieved on the cure or removal of the exciting cause.

Ulceration and inflammation of the pharyngeal surface of the posterior part of the cricoid cartilage, accompanied with painful dysphagia, and regurgitation or rejection of food, produce not only a distressing and severe cough, but now and then urgent dyspnoea.

Perforative ulceration of the soft palate, with acute inflammation of the throat, generally specific in its nature, is attended with cough and much expectoration of pus and mucus, simulating hectic.

An elongated uvula, associated or not with a pendent epiglottis, produces at times the most irritating suffocating cough, attended with a sensation of more or less constant tickling, which keeps up an incessant hemming and coughing.

Enlarged tonsils, from the irritation they set up in some persons, give rise to cough and expectoration of mucus secreted from the neighbouring follicles.

Such are the chief varieties of cough originating from some morbid condition in the throat. If, however, the subject be proceeded with, it will be found that other circumstances in which the larynx is involved, give rise to what may be called *laryngeal cough*. Chronic inflammation of some portion of the mucous membrane of the larynx, with thickening, ulceration, and swelling, induce troublesome and persistent cough.

Closure of the ventricles, by the extension of a sort of false membrane from the lower margin of the false to the inner attached border of the true vocal chords, associated with a chronic congestion of the last, and some amount of thickening, originates a loud and hoarse cough, and an equally loud and hoarse voice.

Extreme thickening of the epiglottis, which resembles the walls of one side of a crater, with inflammation of the free margin, and probably laryngeal surface, and ulceration of the posterior part of the interior of the larynx, which may be limited, or extends deeply, is attended with a severe, constant, and painful cough, occasionally associated with dysphagia, and aphonia. This state of things has been observed by me

in so many cases of acute phthisis, and occasionally in the more chronic form, that I might speak of it as almost pathognomonic of acute tuberculosis. I have seen it before a trace of disease existed in the lungs, yet so rapid is its progress, that tubercle is deposited with the utmost rapidity, great and urgent dyspnoea sets in, extremely rapid breathing, and death from extensive consolidation, generally of the lower lobes of both lungs. This condition is given here as producing throat cough, firstly, and subsequently chest cough, but it may be correctly stated, that the cough is for the most part of a painful laryngeal character throughout.

Next to the foregoing we have the peculiar cough, originating in minute or disseminated ulceration of some part of the larynx. This may or may not be associated with pulmonary tuberculosis. At any rate if it be, the character of the cough is changed, it becomes much aggravated, and the chest disease often runs along *pari passu* with the laryngeal, although it frequently outstrips the latter in the rapidity of its termination to a fatal issue.

A not uncommon cause of a hacking and apparently bronchitic cough is irritation or irritative congestion of the anterior part of the subglottis, which is seen to be red, excoriated sometimes, and even ulcerated, giving rise to the secretion of phlegm, occasionally mucus, muco-purulent, or truly fibrinous in its character. Such a condition is not unfrequently associated with congestion and thickening of the mucous membrane of the trachea.

Growths in the subglottis, on one or both sides, give rise to a truly distinctive form of strictly laryngeal cough—a term commonly entered up in such cases in my note-books. Varieties of the same form of cough, are induced by growths in other parts of the interior of the larynx, associated with or without aphonia and hoarseness.

Acute or chronic chorditis vocalis—aphonia arising from inflammation of the vocal chords—may be associated with cough, according to the amount of irritation present, and discomfort arising from it.

In this category might be included inflammation, suppuration, and death of some one, or portion of, the laryngeal cartilages, especially of the arytenoid and cricoid. In necrosis of the arytenoid not only are the symptoms most distressing, and the patient frequently threatened with suffocation during deglutition, but the cough is of a violent hacking character, with abundant expectoration of mucus and pus combined, and unless the laryngeal disease speedily comes to an issue, the lungs are invaded, and the patient is sacrificed.

Certain diseases of the os hyoides may be mentioned as

producing laryngeal, or throat cough. These are inflammation of the body, or of one horn, proceeding to necrosis and suppurative expulsion, or simple periostitis of some part. In the former, phthisis pulmonalis has several times been diagnosed when, on expulsion of the bone, a rapid and complete recovery has ensued.

It will be apparent that the conditions giving rise to cough in the larynx are even of more importance than those originating in the throat itself.

And, lastly, of cough proceeding from the trachea—the *tracheal cough*. Acute or chronic inflammation of the mucous lining of the trachea (excluding croup in the child) produces cough the same as similar conditions of the bronchial tubes. In many obscure and doubtful cases of cough, with nothing whatever to account for this symptom within the chest, the cause has been made out, after very careful examination, to originate wholly and entirely in the trachea, and when treated in accordance with such a discovery, an effectual and speedy recovery has followed. Sometimes the inflamed or congested membrane has been attacked with ulceration, extending even into the commencement of the bronchi, and a cure has fortunately been effected with perseverance and care.

Such a series of conditions as the foregoing, giving rise to cough in the throat, larynx, and trachea, will perhaps astonish those who have not paid any attention to the subject; but when it is stated that all have been carefully made out with the aid of the laryngoscope after patient and diligent investigation in a considerable number of cases, in both public and private practice, the conscientious and painstaking physician will aid my efforts to propagate truth and scientific medicine, by investigating for himself what has been brought under his notice, and confirming what is already becoming familiar to the select few who are working out the different branches of the pathology of the throat and larynx.

The observation might be made that the causes of cough already given include the greater number of throat and laryngeal affections, but such is not the case. A fair proportion are associated with cough, and as has been already stated, so strong is the simulation of pulmonary cough by some of them that the actual cause producing the cough is overlooked. My main object in this essay, therefore, is to draw attention to the subject, so that a clear and good distinctive diagnosis may be made with the aid of the laryngoscope, and the lesion present producing or giving rise to the cough cured. A few cases have been selected from my note-books in illustration of the varieties of throat cough. They show what may be done in the way of treatment, and how suc-

cessful it proves when the local and easily accessible cause is removed. Patients affected with cough are always anxious to believe its situation to be in the throat, and of the number who have so consulted me, their belief was not wrong in a fair proportion. Expectoration again may proceed in large quantities from the larynx and the throat, poured out by the numerous follicles in those parts, either themselves diseased or irritated to excessive action by neighbouring disease. This, and cough combined, have strongly resembled consumption of the lungs.

The limits of this essay will not permit me to give more than the following dozen cases, which are narrated briefly, and at the same time clearly enough to show the cause of the cough, and how it was got rid of.

Throat Cough simulating disease of the Chest, from follicular disease of the throat and larynx, and complete pendency of the epiglottis; cure in 10 days.—Mr. J. G. D., aged 41, consulted me August 29, 1864. Had been suffering from a relaxed and follicular throat for nine months, with constant cough, and hemming and hawking of phlegm; the slightest draught of air not only increased these symptoms, but produced hoarseness and difficulty of speaking. He had been ill on previous occasions, and the sponge probang was freely applied, generally followed by a feeling of intense suffocation, lasting for many minutes. He was so much distressed and worn out, that he had made up his mind to die, under the impression that he was fast breaking up from disease of the chest and throat together. At one time he was in the habit of taking as much as $\frac{3}{4}$ of an oz. of snuff daily, but did not now use it. Besides the extremely granular condition of the fauces, extending upwards to the base of the sphenoid, and downwards as far as could be seen, the laryngeal mirror revealed a pendent and quite flat epiglottis, its lingual surface streaked with large red vessels, and so completely immovable that the interior of the larynx could not be seen, unless with great difficulty. The lungs were perfectly sound, yet he had worn a respirator for some time. The mucous membrane of the larynx was pulpy, congested, and pouring out mucus, and little follicular dots of redness were seen here and there. He was at once put upon constitutional treatment of a supporting, bracing, and yet alterative kind, and local treatment was carried out as well. On the 2nd September, the fourth day of treatment he did not look like the same person, his cough had diminished, the face was clear, eyes bright, epiglottis more erect, and there was very much less discomfort. With the aid of the mirror an argental shower was sprinkled upon the interior of the larynx with ease. By the 8th the epiglottis

was still further elevated, the cough quite gone, all irritation had subsided, and he could expand and fill his chest with air, permitting him to feel altogether a new man. He left for Devonshire a few days after, cured.

Throat Cough of a violent character, with constant tickling, induced by an extremely long uvula, pendency of the epiglottis, and follicular disease; satisfactory cure.—The Rev. A. J. L., aged 60, consulted me January 6th, 1864, recommended by Mr. Thos. Hunt, under whose care he had been for a cutaneous malady.

He had been subject to a throat cough for more than twelve months, and had wholly to give up preaching. When he coughed he said it shook his head to pieces, but it was always easier when phlegm was expectorated. His general health had suffered in consequence. Inspection with the laryngeal mirror and the eye explained all, for the epiglottis was found to be pendent and quite flat, its lingual surface being streaked with vessels. The uvula was elongated, with its terminal end formed of mucous membrane alone, quite moveable and constantly tickling the epiglottis, and so causing the cough. The throat was follicular, and I freely applied topical agents to it. His lungs were quite sound.

He improved under treatment, but the cough and tickling persisted until the 10th of March, when I removed the loose piece of membrane at the end of the uvula; the effect of this was, that by the 30th he was able to read aloud quite well, and had his old voice back again; and shortly after he commenced to preach, and resumed his regular clerical duties. The epiglottis now became a little more elevated, and his general health wonderfully improved.

When this gentleman first came to me, his cough, hemming and hawking, gave the impression that he had serious old bronchitic disease, and previously all the treatment had been directed towards relieving the chest malady, the throat being quite overlooked. I was not satisfied until, on examination, I found his chest quite normal, and that the cough originated in the throat. His cure then was promised with certainty, on removal of the chief exciting cause of the cough.

Throat Cough, loss of voice for seven months, and difficulty of swallowing, from extensive ulceration, and loss of the soft palate, and thickening, inflammation, and unyielding erection of the epiglottis; good recovery.—Mrs. S., a young married lady, aged 26, came to me from Mr. Quain, on the 7th July, 1864, for laryngoscopic inspection. She had been under his care for sloughing of the soft palate and other parts, which began a year ago when abroad. The progress of the disease he had arrested, but for the last few days she had much cough, and

inability to swallow without fits of coughing. Mr. Quain thought there was an extension of the ulceration towards the glottis, and he wished me to examine her with the laryngoscope. I learnt from her that her voice had been gone for seven months, and she had eaten nothing for three days. The laryngoscope showed thickening, oblique permanent erection, and some inflammation of the epiglottis, with a similar condition extending to the interior of the larynx, but no visible ulceration. There was superficial ulceration low down in the pharynx on the right side, and inflammation of the right thyro-hyoid ligament. The chief cause of the dysphagia and cough was now the thickened and unyielding condition of the epiglottis, for which I suggested amongst other things, sucking pieces of ice. My prognosis was doubtful from the condition of the epiglottis, for it simulated that occasionally seen in the acute form of phthisis. The velum, uvula, and other parts were gone, and the posterior nares were free from ulceration, and perfectly healthy. She went to Sheffield after this, and in a letter to her medical adviser, I suggested feeding by the stomach-tube if necessary, in addition to treatment.

On the 5th September she called upon me wonderfully better, her general health had much improved, the voice was restored, but of a rhinophonic character; she had no cough at all. The epiglottis and entire larynx were normal; there was no dysphagia, and beyond the terrible loss she had sustained in the mouth, she was comparatively quite well. There was quite sufficient to explain the presence of the cough in this case, and I had at one time anxious fears for the result.

Very severe and distressing Laryngeal Cough, and copious expectoration, with hoarseness and pain in the Chest, from ulceration at the back of the larynx; cure in ten days.—The Rev. James D. D., aged 51, consulted me 20th May, 1864. His history was that he had ulcers in the throat in April, 1863, and in March, 1864; on the latter occasion he lost his voice. When I saw him he was hoarse, had pain in the side, and was coughing constantly, with thick mucous expectoration, ejected by much hemming and hawking. For the last month he felt a weight in the chest, and most acute pain at certain times, almost taking his breath away. His general health was good, and his appetite and spirits perfect. He felt as if there was a lump at the back of the throat when he swallowed, and his nose and throat constantly required to be cleared of mucus. Had ceased to do duty for some time, and much talking produced violent coughing. Treatment had been hitherto fruitless. The laryngoscope revealed a large ulcer, in front of and between the two arytenoid cartilages, with

irregular, prominent, and red margins; the vocal chords were congested, and the larynx was otherwise normal. His treatment consisted of showers of various solutions, chiefly of zinc and preparations of silver, together with tonic and alterative medicines, and soothing and mildly astringent gargles. In ten days, that is to say by the 1st of June, the ulcer had healed, the cough had wholly and completely vanished, the expectoration had ceased, and his voice had resumed its natural tone, of a fine baritone, for which his father, a well known Admiral, who served in the Crimean war, was celebrated. With the exception of a mild return of his old complaint, from the 10th to the 18th of October, following a cold, he has continued quite well.

It may be remarked that the rapidity with which the cough diminished in this case was most striking, as soon as its exciting cause was removed. There was no chest manifestation whatsoever at any time.

Distressing and severe Laryngeal Cough, with hoarseness for nearly five years, produced by a large growth in the left subglottic region.—Mr. P., aged 64, consulted me October 10th, 1864, recommended by Mr. T. Bickerton, of Liverpool. He had been a sufferer for the period of six years, from chronic disease of the throat, associated with hoarseness for nearly five years. Began to get worse last Christmas, with no regular chest cough, but one of a distinctly laryngeal character, kept up by a desire to expel a little mucous phlegm from the larynx. His breathing was rough, and at times associated with stridor. General health and appetite good; breath short on going up stairs, followed by copious perspiration. Voice was hoarse and low, but not actually gone.

Laryngoscopy showed general disease of the pharynx, with scooped out and enlarged follicles. Epiglottis pendent, and twisted towards the right side, permitting only of a slow and gradual view of the larynx. Both vocal chords had lost their white colour, and were thickened, narrowed, and of a pinkish drab colour. Beneath the left, and partly involving it, was a large projection or growth, occupying the entire left side of the subglottis, with a broad base, and extending fully to the middle of the cricoid area. It met the right vocal chord, on attempting sounds, and its surface was raw, as if ulcerated. There was ulceration at the posterior part of the larynx, running down to the growth. Here was the explanation of the cough and hoarseness. I treated him with showers of nitrate of silver solution, and constitutional remedies, healing up the ulcers and lessening the irritability and spasm of the glottis with such good effect as to greatly diminish the cough; but

all attempts to touch the growth with any instrument were impossible, for the spasm was such as to threaten suffocation. The lungs were sound, and he is now under Mr. Bickerton's care.

Severe hacking irritative Cough, constantly present for 6 months, proceeding from the larynx ; cure in a fortnight.—Mrs. Lydia B—, aged 58, consulted me June 23, 1863, recommended by Dr. Hy. G. Wright, of Somerset Street. She has had a harassing and constant cough for 6 months, with a desire to expectorate but without the expulsion of any mucus. Three weeks ago, lost her voice, it returned, but every afternoon hoarseness sets in and the voice goes. She has sore throat as well, very bad at night, and cannot swallow with it; copious nightly perspirations and “cold shivers.” The cough is loud and dry, besides being hacking and constant. No disease was discoverable in the chest; but on introducing the laryngeal mirror, the epiglottis was seen to be a little pendent, much care-worn, and streaked with vessels, projecting towards the right side. The action of the vocal chords was irregular, especially in the left, which seemed sluggish and partly paralysed; it was rough also and discoloured, serrated on its free-border, and did not form a parallel with its fellow on approximation. The margins of the left ventricle were very red. The throat was much congested, the follicles enlarged, and the membrane relaxed. Mild local treatment was carried out every second day, and bromide of ammonium given in full doses, internally. The result of this was that the cough disappeared in two weeks, and the larynx was restored to its healthy condition. At first I could scarcely believe that the cough proceeded from the condition of the throat and larynx, yet on restoring these latter to a healthy state it quickly disappeared.

I had my doubts as to the propriety of giving the next case in this essay, because of the presence of phthisis, yet, as the malady was in the first stage, and the cough was kept up solely by the condition in the larynx, I feel justified in doing so.

Consumption in the first stage, cough kept up by the state of the larynx, the lining membrane resembling thick red-pile velvet ; its disappearance on curing the latter.—Miss W., aged 26, consulted me, August 20th, 1863, for her cough and throat. There was a well-marked phthisical history, for she had lost brothers and sisters by the complaint. She had spent the last four winters at Torquay and Clifton. The last winter at Torquay she suffered from relaxed throat and incessant cough, losing her voice occasionally. She said she had a double pleurisy there. The sore throat has continued with a continual

cough, and yellow expectoration, not purulent. She had not lost flesh, but was depressed and languid. A careful examination of the chest revealed the commencement of the first stage of consumption, but with no rales of any kind present; there was no dulness anywhere, yet the condition of the breathing and other physical signs unmistakably pointed to what was going on. The velum palati and uvula were granular; the larynx was extremely congested, and the mucous membrane swollen, and looking like thick red-pile velvet on the false vocal chords and laryngeal surface of the epiglottis. I at once applied a strong solution of nitrate of silver with a brush, and repeated it on a few occasions, with the effect of removing the congestion and thickening, and arresting the cough, and thus staying the progress of her family disease. I treated her for a throat affection in the usual way, and it removed a cough which clearly originated in the larynx. With the phthisical tendency present in this case, I found much benefit to accrue from the tincture of sanguinaria, given internally with other agents.

Hoarseness and Tracheal Cough, the result of chronic inflammation of the trachea and subglottis, the sequel most probably of an attack of scarlet fever; cure in a fortnight.—Miss E. L. M., aged 23, a young lady from Lincoln, consulted me on the 29th January, 1864. She had been delicate from a child, as her medical attendant Dr. Lowe informed me, and ever since she had scarlet fever twelve months ago, was subject to attacks of hoarseness, and a short, hard, irritable cough. The slightest exertion of the voice even brought on both. By the advice of Mr. Erichsen, she had had the larynx mopped out with a solution of nitrate of silver, and was put upon tonic treatment, but the relief was but temporary. She was recommended to go to a drier climate, but she said she would be guided by my opinion. The catamenia were regular, and the lungs perfectly sound. Her voice was soft and melodious, but became hoarse after a little reading. I learnt from her that she had had a cough for probably four or five years, and that summer or winter she did not lose it. Had not been able to sing for three years.

Laryngoscopy showed the membrane of the larynx pale, with some relaxation and slight redness of the right side. The vocal chords were normal. From the subglottis downwards into the lower trachea, the lining membrane was in a state of general hyperæmia, partaking of the character of chronic inflammation in the upper part of the tube. The membrane of the fauces was a little relaxed. No other condition was present to account for the cough, but that observed in the trachea and subglottis, and topical treatment was

carefully commenced, as well as strengthening constitutional. Every two or three days some local application was made to the parts specially affected by means of my fluid pulverizer, and showers of various solutions sprinkled the parts with the greatest accuracy. The result of this was, the cough gradually subsided as the trachea and subglottis were restored to a natural condition, and in a fortnight she was cured. I saw her subsequently as she passed through town in May and June, and have heard from her friends up to quite recently, and the cure has been permanent, for her tracheal cough has never returned, and both her singing and speaking voice are unimpaired.

In another instance of a lady, aged 50, who was under my care at the same time as in the last mentioned case, severe cough and irritation of the throat were present for many years, attributed to the taking of arsenic and iodine for psoriasis. A little congestion of the larynx and epiglottis was observed, and much old inflammatory redness and thickening of the mucous membrane of the trachea. Five applications of showers of various solutions effected a perfect cure, with some suitable constitutional treatment.

In still another example, severe tracheal cough and dyspnoea were kept up by inflammation of the lower part of the trachea, especially on the right side, extending into the bronchi, the right bronchus probably ulcerated with constriction, partially accounting for the dyspnoea; indeed, the symptoms had pointed to this for two years, such as severe cutting pain, corresponding to the situation of the bifurcation of the trachea.

In another case, recently seen with Mr. Hammerton, of Piccadilly, the most violent hacking cough could be attributed to no other cause than extreme congestion of the entire trachea, and probably of the larger bronchi. The chest symptoms were utterly insignificant, the lungs had been pronounced quite sound by Dr. Williams, and the cough was said to partake of a nervous character.

From the few examples I have given, it must be admitted that not only does a cough originate in the throat, larynx, and trachea, quite independently of true disease of the lungs, but that remedies applied under the impression that the lungs are involved, will not cure it. Pharyngoscopy, laryngoscopy, and tracheoscopy will determine its nature, and the cure, if the malady be not too far advanced, is within the reach of probability. I trust, however, that sufficient has been stated in this short essay to prove that *throat cough* is neither an anomalous symptom, nor an unrecognised fact, capable of explanation in the simplest manner.

I may add, in conclusion, that although no rules can be laid down for the diagnosis of the precise seat of a throat cough by the mere character of the sound it produces, a proposition, which is in reality an absurdity, yet as such a one was actually submitted to me, I may say that it is quite possible to recognize a cough arising from a pendent epiglottis, or from obstruction below the glottis confined to one or both sides. The special cause giving rise to the cough can be determined only, in the majority of cases, by a careful examination with the laryngoscope, when the course to be pursued is obvious.

Portman Street, Portman Square, Nov., 1864.

Case of Hereditary Malformation (Webbed Fingers). By HENRY BARBER, M.D., L.R.C.P., Lond., Ulverston.

AT the present time, when the minds of scientific men are so much divided about the question of hereditary influence, any contribution of facts bearing upon this important subject cannot fail to be productive of some advantage. The following case of abnormal development is interesting, if only from the extraordinary manner in which the deformity has been transmitted, and, although exceptions have occurred in each family of the descendants, still the *tendency* in each successive generation to produce the variation must be regarded as an important circumstance. It is submitted as an illustration of a monstrosity of that class, of which, according to Darwin "On Species," p. 155, Geoffroy St. Hilaire "seems to entertain no doubt, that the more an organ normally differs in the different species of the same group, the more subject it is to individual anomalies." Further, if as Darwin says, "it is only in those cases in which the modification has been comparatively recent and extraordinarily great that we ought to find the *generative variability*, as it may be called, still present in a high degree," it is reasonable to suppose that the case alluded to approximates closely to the original modification of structure.

Could one have the good fortune to keep within view of the offspring of this individual, the theory of the above author that "abnormally developed organs may be made constant," could be investigated, and the truth determined.

Leaving the discussion of the laws of variation to more scientific persons than myself, it will be better to introduce the subject of the present paper by commencing with some particulars of the history of J.— K—, a widow, aged 64, who with the exception of lameness caused by an ulcerated leg, is

in tolerable health and in possession of all her faculties. She has certain peculiarities of deformity in her hands which she inherited from her father, being the eldest of his five children, and the only one thus afflicted.

Her grandmother, during her first pregnancy, was passing through a farm-yard, when she was attacked and severely bitten by a savage dog, her hands being dreadfully lacerated in attempting to defend herself; the child (afterwards father of the subject of this notice) at its birth presenting the same strange appearances which are observed in the person of J. K., his eldest daughter.

J. K. has had five children, one son and four daughters; the son and youngest daughter had the deformity, while the three intermediate daughters had their hands perfect. The preponderance of the abnormal development of the hands in this remarkable way became striking in the next generation, for J. K.'s son married, and has had six children, three since dead, and one only out of the six escaped the malformation. The youngest daughter of J. K. (since dead) also married, and had two children, both boys, the eldest deformed, but the younger free from deformity. Although the writer regrets he has not been able to examine personally these children, still he has abundance of reliable testimony that they were affected similarly to their grandmother, J. K., and like her had no unnatural formation of the feet, the hands only being implicated. The deformity of the hands has consequently presented itself in *three* successive generations of the same family.

As is commonly the case among hard-working females, the hands of the old woman are rather large, and the wrists proportionably wide, showing that she has been possessed of considerable strength; indeed, when younger, she could perform almost all the duties of a domestic farm-servant, including milking, sewing, &c. With the exception of the thumbs, which are the most erratic in conformation, the metacarpal bones, and those of the fingers of the two hands, are symmetrical. There appears to be nothing peculiar in the carpal and metacarpal bones of the fingers, but there is an abnormality in the metacarpal bones of the thumbs, which for facility of description will be described separately. The first and second rows of phalanges are perfect, as well as their several articulations with the metacarpal bones and each other; the integument, however, is continuous, forming, in fact, webbed fingers, and allowing only very slight lateral motion. The index finger of each hand is only partially included in the web, having been separated by the knife when J. K. was an infant as far as the middle of the first digital phalanx. The remaining fingers at the third phalangeal

articulation have bony adhesion, and consequently possess no mobility, the third joint from the index finger being double, and here the unguis phalanges are somewhat contracted and ride over each other slightly, the nails being short and unshapely. From a little below the unguis phalanx of the fourth finger on the outside, a rudimentary finger crops out, attached to the other by a web, and presenting at its extremity a small but well-formed nail, making the unguis phalanges of the fingers five in number. It ought to be observed that in the case of the children of this woman the fingers were all webbed, and did not present the difference caused in her own through surgical interference, but adhered pretty closely to the original deformity.

The thumbs are the most curious in their formation and deserve particular notice on that account, as well as for their want of symmetry.

In the right hand there are two distinct bones in the metacarpal and first phalanx of the thumb, connected apparently by an interosseous membrane, and at the double carpo-metacarpal, and metacarpo-phalangeal articulations by strong lateral and transverse ligaments.

Here a remarkable freak of nature occurs, for the unguis extremity of the thumb consists of three distinct phalanges, all adherent and immobile, the outer and inner ones being terminated by nails, but the end of the centre bone, which rises between the two former, is provided only with a hard, horny covering of cuticle.

The thumb of the left hand presents a more strange deviation throughout its whole form, approaching almost to a climax of disfigurement. There is only one metacarpal bone proper, but there is a separate, supplemental, metacarpus which extends from the carpo-metacarpal articulation of the thumb to the phalangeal articulation on the inner side, passing clear of the metacarpo-phalangeal joint, but attached along its course by the web-like expansion of the integument before described. The unguis extremity of the left thumb consists of two phalangeal bones, each bent at an angle so as to represent two letters V in shape, with the angles directed outwards, and the broad parts inwards (the upper and lower ends of the bent bones being in apposition), giving a diamond-shaped appearance to the end of this thumb, which at this part is more than an inch in width; each is terminated by a nail, and united by interosseous membrane and integument. These look like rudimentary joints, but have no motion; and, in addition, there is a third phalanx, which seems to be a continuation of the elongated metacarpus, passes to the inner side and underneath these contorted terminal bones, and presents the appearance of a nail.

Essays and Reviews on Affections of the Nervous System, including their Pathology and Treatment. By WILLIAM CAMPS, M.D., Member of the Royal College of Physicians, London, &c., &c.

PRACTICE WITH SCIENCE.

No. 1.—*On Hysteria, and the Hysterical Constitution and Temperament.*

[Concluded from page 706.]

IN many of the various diseases affecting the nervous system—and in none of these more than in the one now under discussion, Hysteria—the subjects of observation, are those in which both matter and mind are simultaneously concerned; matter in its most subtle and complex organization; mind in its almost inexplicable relations to this subtle and complex organization, and both subjected to various influences from without, as well as liable to great changes of state and condition, from morbid actions going on within the body. This being so, the pathological importance of these various morbid affections of the nervous system cannot fail to arrest and detain the attention of all observing and reflecting practitioners.

In the last number of the “Medical Mirror,” I detailed the leading particulars of a very severe, protracted and intensified form of Hysteria under my own care, and in doing which, I attempted to describe the gradual, yet regular progression of the symptoms or phenomena, as they advanced from below upwards, showing therein that the several motor nerves, with their appropriate muscles, were morbidly affected in this patient. I showed by what means the evidence of morbid affection of the muscles, which anatomy makes known to us, are supplied by motor filaments of the seventh and fifth pairs of cerebral nerves, was almost constantly furnished to me in this particular case; and I may here mention, that the evidence of similar morbid affection of the muscles supplied with nervous influence or energy, by filaments derived from the sixth, fourth, and third pairs of cerebral nerves, was furnished to me by peculiar spasmodic actions of the two globes of the eyes.

I need not here repeat the evidence, that the second and first pairs of cerebral nerves, namely, the optic and olfactory nerves were morbidly affected; for I have already stated that the senses of sight and smell were frequently impaired or perverted. This disposes of the bodily or *somatic* portion of the case; and the *psychical*, mental, or intellectual portion

was not less instructive and interesting, in consequence of throwing light upon not a few particulars, necessarily concerned in some of the milder, transitional forms of mental or psychical pathology. The scientific and therefore satisfactory detail, necessary to elucidate the obscure, because imperfectly recognised forms of disease of this description, and of this case in particular, would occupy more time and space than can now be given to this important subject. I should have wished to adduce evidence to show how far, and to what extent in this patient the intellectual functions were or were not morbidly affected. The peculiar actions or manifestations denoting the condition, whether morbid or healthy, of the memory, the imagination, the judgment; as well as of the emotions, the affections, the conscience and the will, presented from time to time, very many points of the highest psychological value and importance. As in most, if not in all well-marked cases of hysteria, there was very commonly great impairment of the self-controlling power of the will; or to express the same fact in different terms, the emotions, very commonly appeared to antagonise and frequently to overcome that high mental faculty—the will—the queen-regent of the mind.

It would occupy far too much time, as well as space, in the Journal, to give in anything like adequate detail, the particulars of the whole of the treatment adopted in the foregoing case; although the result of the treatment was in the highest degree satisfactory, alike to patient, to friends, and to physician. The recovery, the restoration to health was slow, yet gradual.

The general principles involved in the course of therapeutics adopted and persisted in, in this particular instance were, in brief, as follows:—

Abundance of the best and most nourishing foods and drinks, occasional use of cordial stimulants, fresh, pure air, copious ablutions with cold and tepid water, as much repose, both of body and mind, as the patient could and would obtain, occasional but not too free purgations, frequent administration of chalybeates, especially of that very agreeable form of them known as steel wine, of which the patient drank very freely; phosphorus, in various forms and vehicles, and by way of moral treatment, the avoidance, so far as possible, of all causes or sources of irritation, leaving the patient as much permission to do what was most pleasing and amusing to herself, in modes too varied to be enumerated now.

I stated in a former number of this journal, *vide* page 387, that I had seen several well-marked cases of this

disease, Hysteria, in the male subject, the details of which I proposed to lay before its readers.

I proceed now to fulfil this promise, and in doing so, in order not to fatigue my readers by unnecessary prolixity, I will be as brief as possible in the narration of three or four such cases in the male, as may be consistent with the subject under consideration, and confine myself to the notice of their more salient points; points or particulars, however, which must be somewhat fully adverted to so as to present to my readers a sufficiently clear and distinct perception of the disease itself.

As I do not consider that I address myself to a body of medical students, engaged in acquiring a knowledge of the principles and practice of medicine, I need not here enter upon a description of the hysterical paroxysm, for that may be found in all the works that professedly treat of systematic medicine.

Amongst a considerable number of cases greatly diversified in their particular features of character, at the same time presenting not a few points of general resemblance, which I have had directly under my own care and observation, some of these cases have occurred in the male sex, and two or three of these cases I propose, before concluding the subject of hysteria and the hysterical constitution, briefly to submit to the notice of the readers of this Journal.

Of these, one of the most well-marked cases occurred in the person of a gentleman, unmarried, about thirty years of age, who was at that time engaged daily in active mercantile pursuits, a merchant in the City, in whose case I had the able assistance, with the customary sagacious advice, of the late talented physician, Dr. Richard Bright, of Savile Row. Whilst under my care, and before I consulted with Dr. Bright upon the case, the patient, at times, and, moreover, not unfrequently, exhibited nearly all the ordinary symptoms usually observable in a so-called nervous, excitable, hysterical female. In addition to well-marked evidences of physical, bodily derangement, and more especially of derangement of the hepatic viscera, this gentleman very frequently and chiefly, as is more common in such cases in the morning, exhibited some indications of psychical derangement, so as to cause considerable anxiety to his friends, as well as to be productive of great annoyance to himself. He had been a long time unwell before he consulted me, and his ordinary habits of life had become altogether suspended, altered, or otherwise interfered with, and his usual manners and customary conduct or behaviour had become strangely changed for the worse, in fact he had undergone a striking and, at the same time, a

distressing moral, rather than an intellectual metamorphosis of character.

This gentleman, after by no means a protracted indisposition, ultimately completely recovered his health, and soon after his restoration to health he married, and became the father of several children, and also engaged, as formerly, with activity, energy, and success in his business occupations.

The chief points of treatment in this case, as vigorously adopted and persisted in by Dr. Bright and myself, consisted in repeated free, copious purgations, good food and drink, tonics, and fresh pure country air, the patient completing and perfecting his restoration to health by quitting London for a time to re-visit his native town or village in one of the midland counties.

Another case of this description much longer in its duration and more severe, and more perplexing in some of its characters, occurred in a married gentleman in the middle of life, the father of a large family of young children, residing in one of the suburbs of this metropolis. In this case there was, for long continuance, very great weakness or feebleness of mind, so much so as almost to incapacitate the patient from attending properly, if at all, to his ordinary business and domestic duties. Here the ordinary bodily functions were not so perceptibly impaired as were the intellectual functions; the functions of the moral nature of the patient remaining unaffected throughout the disorder. The senses, too, were throughout unaffected, whilst however there was, commonly, a considerable degree of confusion of mind, and incapacity, or indisposition to the exercise of thought, or of mental application of any kind whatever. There was also, most commonly, much indecision or indetermination of will; I might almost say that, at times, there was a kind of paralysis of the will. I regarded this case as one in which the physical state of the patient was disordered, and, in consequence of this disordered bodily condition, the mental or psychical functions of the patient became concurrently impaired or disordered. There was commonly very much gloom, misery, and dejection of mind, almost amounting at times to despondency, yet, withal, never any pain in any part of the body. In this case every possible cause or source of annoyance, vexation, or irritation was, as far as practicable, avoided, and with the best and most successful results; for although this patient continued a long time in this unhealthy condition, yet he ultimately made a complete recovery, and attained to perfect restoration of health, both bodily and mental.

Another case of this disease in the male subject occurred in the person of a professional gentleman, between thirty and forty years of age, residing partly in London and partly in the country, at some distance from town. The attack, or paroxysm, or fit as it might and would be vulgarly termed, seized him one evening whilst at his country residence. The paroxysm was in this case somewhat severe in its character, yet not long in its duration, although it was followed by a considerable degree of exhaustion, almost amounting to collapse. There was sighing, and sobbing, and crying, accompanied with violent tossing about of the limbs and trunk of the body, and of the head; some of these movements of various parts of the frame closely approaching to convulsions, consciousness and sensation however but little if at all impaired throughout the attack or paroxysm, the termination of which, as in epilepsy, was succeeded by a sense of fatigue, and disposition to sleep—somnolence. Repose, so far as practicable, both of body and of mind, with warm cordial stimulants, were the remedies successfully administered in this instance, followed by purgatives, tonics, especially pure, fresh air, and cold sponging and bathing.

The paroxysm in this case was succeeded by one striking phenomenon, by no means commonly observed after paroxysms either of hysteria or of epilepsy. On the morning following the paroxysm I observed a copious and widely-spread eruption of urticaria, covering the fore part of the trunk of the body, and partially, also, the upper extremities. This eruption although extremely well-marked, and therefore easily recognised throughout its duration, was not persistent for any length of time, so that it could only be regarded at most as a case of urticaria evanida, and not one of urticaria persistens.

I may here remark, that this occurrence of an eruption of the skin, assuming the form and characters of a well-marked case of urticaria, immediately following upon a paroxysm of nervous disease, closely approaching to, if not absolutely, an attack of convulsions, suggested to me for the first time, the great probability of disturbances of some parts of the nervous system being concerned or connected with the production or evolution of certain forms of eruptions of the skin. From this instance, and from subsequent observations bearing upon this subject, I have been induced to conclude that disorders or irregularities of the nervous system may, in not a few cases, operate on some constitutions, as factors or producers of certain forms of cutaneous diseases.

I cannot now cite authorities on this subject, but I believe that this idea or hypothesis of the nervous origin of certain

forms of cutaneous diseases, has been more fully confirmed, and in some cases satisfactorily established as a pathological fact by subsequent observers, who have given their attention to this subject.

Vaso-motor pathology and therapeutics appear to myself to lend support to this idea or hypothesis.

In regard to the subject of *treatment* of the disease under consideration, I must be brief, and therefore very general, although this subject is of the first and last importance in this, as well as in other diseases; seeing that nothing less than the prevention, the relief, and where possible, the cure of disease, should be the distinct, the legitimate aim and design of the medical practitioner.

To comprise within the compass of a few pages of letter-press the extensive subject of therapeutics adapted to diseases of this class, would be a vain and profitless attempt, as well as, if even it were possible, an undertaking that would probably prove not a little wearisome to the reader. In the limited narration of the foregoing cases, the general principles of treatment involved and demanded are more than glanced at; for here, as in most other diseases, each case must, to a certain extent, be treated upon its individual requirements, and these will of course be furnished according to the skill and judgment of the practitioner in attendance. The appropriate, the proper remedies for ordinary cases of hysteria, are amply detailed in all works that treat of diseases in general, and of the practice of medicine. Tonics, evacuants, anti-spasmodics, and calmants, as a variety of sedatives, will include all, or nearly all the remedies demanded from the stores of the druggist; whilst in the mode, and form, and time of their administration, will be seen the medical art and skill of the physician. Of tonics I have already stated, that the chalybeates or preparations of iron have, with me, proved of essential service. Good, generous wine I have also found sometimes instantaneously to act efficiently; and in cases of great irritation, to calm, to soothe, and to tranquilise. As a good and reliable anti-hysterical draught, I do not know a better than repeated doses of rum and milk, sweetened with sugar. In fine—for a whole treatise might be occupied with the discussion of remedies appropriate in this and other nervous disorders—whatever tends to favour the production of healthy blood should claim the earnest attention of the physician.

In the appropriate and successful treatment, not only of the disease now under consideration—hysteria—but also of many others affecting the brain, spinal cord, and nervous system, there is, I conceive, no one element of greater import-

ance than a just estimate of the value of *time*, or continuous duration; for not only hysteria but many others, such as, for instance, epilepsy, chorea, and the various forms of paralysis, as hemiplegia and paraplegia, are in their very nature diseases which from their commencement assume a chronic rather than an acute character; and, therefore, this particular disease, as well as the others just now mentioned, may be reasonably expected to make great demand upon the time and attentive patience both of the practitioner and the attendants, as well as of the sufferers themselves. It should even be borne in mind that nature as in formation, so too in reparation of tissue, is seldom or never in a hurry, taking *time* to do well whatever is done for her own requirements.

In the mental or moral treatment of the severe or more exaggerated forms of the disease, whether occurring in the male or in the female sex; I mean by these forms of the disease, such cases as in some of their more prominent symptoms indicate a psychical as well as a somatic or physical derangement or disorder of the system—symptoms which at times compel us to apprehend the transition to or super-vention of a disturbance of the intellectual or moral faculties; in the mental or moral treatment of all such and similar cases of the disease it is, I am convinced by experience and observation, and in some cases, too, by a successful experience, important ever to bear in mind, never to lose sight of, the extremely delicate nature of the tissue or tissues morbidly affected in the disease under consideration. These are, on the one hand, the liquid tissue—the blood with its corpuscles; and, on the other hand, the nerve cells and nerve filaments, the former of these, the nerve-cells, constituting for the most part the numerous nervous ganglia scattered through various parts of the bodily framework; and, moreover, where they, the nerve-cells, are brought into closest relation with the blood and blood corpuscles. The very extreme delicacy of structure, with the especial and peculiar anatomical arrangement of the nerve cells in the nervous ganglia, must have been well seen and observed by means of the microscope, to be duly and adequately estimated, in order to enforce and inculcate the necessary avoidance of all means or measures adopted throughout the treatment of these cases of disease, wherein such very delicate tissue is morbidly affected, that might by possibility in any way cause or produce a sudden, or too abrupt, or unnatural disturbance, or breaking up or disorganisation of these delicate nerve-cells.

Regarding the subject from this point of view, it will not fail to be seen how important it must be in the mental or moral treatment of this disease to avoid or remove, so far as

may be practicable, all causes or sources of annoyance or irritation to patients under our care. And, conversely, the means or measures adopted should, as far as practicable, be of such a nature as are calculated to calm, to sooth, to tranquillise both the body and the mind of patients under our treatment. In many of these and similar cases, the conduct, the deportment, the general demeanour of the ordinary attendants, whether as members of the family of the patients or as hired nurses or companions to them, is of no little importance. I have, I may here state, been induced to believe, that no little mischief to the patients, as well as hindrance to their recovery, has resulted from the injudicious selection of attendants but ill-qualified for their duties. And, conversely, I have known instances where real recovery has commenced, and become apparent, upon the substitution of a proper for an improper attendant or companion.

Underlying, although by no means in the sense of subordination or of inferiority, all the facts, reasonings, or opinions that have been submitted to the reader's notice in the foregoing papers, there has been this one chief, leading, prominent idea, which it is hoped has not only claimed, but has also attracted its due share of attention, as being of the highest importance, not only to the particular subject that has been under consideration—hysteria, but at the same time to the general subject of nervous disorders.

It has been my direct aim and intention in these communications, so far as time and space would allow, to expand and develope this leading idea, this cardinal point, upon which, as it appears to me, so very much of the true pathology of the nervous system must of necessity hinge and depend. This leading idea to which I refer may be briefly expressed, as the relation physiologically and pathologically subsisting between *blood* and *nerve*, between blood-corpuscle and nerve-cell; or, if I may be allowed the expression, whilst speaking of the entire mass of blood and the entire mass of nervous matter in the human body, the relation between the *blood-tissue* on the one hand, and the *nerve-tissue* on the other, for I am convinced, that the more closely the entire subject of nervous pathology is regarded from this point of view—I do not say to the exclusion of all other aspects of the subject—the more sure and certain will be our knowledge of various nervous diseases, and consequently, the more reasonably may we hope to attain to a more rational and successful treatment of them.

Epistaxis as an indication of Impaired Nutrition, and of Degeneration of the Vascular System. By H. GAWEN SUTTON, M.B., Lond., M.R.C.P., Assistant-Physician to the Metropolitan Free Hospital, &c.

It has been usual for writers on epistaxis to begin by remarking, that bleeding of the nose is so common during childhood and youth, and so seldom followed by any serious consequences, that little or no attention is paid to it, and it will probably be admitted by all that they have succeeded in showing that such neglect is a practical mistake.

Before, however, venturing to proceed any further, I would expressly mention that I do not propose to consider the disease epistaxis, but to endeavour to point out that bleeding of the nose is often a sign indicative of impaired nutrition or of degeneration of the vascular system, and to show some of the pathological changes that follow in consequence of this mal-nutrition; in fact, I merely select the symptom epistaxis as being the one most favourable to my object.

To be able, however, to do so, it is necessary to call attention to some of the leading characters of the natural history of epistaxis, and especially to show to what diseases those that are liable to bleeding of the nose are exposed.

Moreover, I hope to be able to point out that there is good reason to believe that such imperfect nutrition is in many instances due to diathetic causes. Nevertheless, there cannot be much doubt that while we take into consideration the influence of diathetic causes, the effect of acquired pernicious habits on the nutrition of the vascular system cannot be overlooked.

With epistaxis, as with most other disorders, there appear to be two classes of cause, a predisposing and an exciting cause. The predisposing causes being connected with the imperfect nutrition of the capillary system, and the immediate exciting causes are of various kinds, but probably they all directly act as such by inducing congestion of the nasal mucous-membrane.

Why bleeding of the nose is more common than any other form of hæmorrhage, is supposed to be owing to the mucous membrane of the nose being more exposed to the influences of external causes than any other mucous surface; and the free communication of the internal maxillary artery which supplies the nasal passages with the branches of the internal carotid within the cranium, points out why, on active congestion of the brain, the nose occasionally bursts out bleeding, and the veins arising from the nasal mucous surfaces, emptying themselves into both the external and internal jugular

veins, seems to explain why in passive congestion of the brain, or in obstruction through the right side of the head, epistaxis is not unfrequently seen, and immediately excited by the act of blowing the nose, coughing, or by other such efforts.

In the natural history of epistaxis, almost all experience agrees in showing that it is most common in spring and autumn, more common in hot than in cold weather, more common in males than in females; that it is more frequently seen in childhood and youth than at any other age; and, lastly, that persons of certain temperaments and certain diathesis are more predisposed to it than others.

But it has been already stated, that in order to be able to show that epistaxis is indicative of disordered nutrition of the capillaries, it is necessary to point out to what diseases those that bleed from the nose are liable, then to try and ascertain to what extent such diseases are due to diathetic or other causes, or to certain habits that are believed to be capable of giving rise to imperfect nutrition and to degeneration of the vascular system.

It is generally known, that during typhoid fever, small-pox, scarlet fever, and measles, bleeding of the nose is not uncommon; also, that it is not frequently seen accompanying rheumatic fever. During the latter disease, however, it is said to be more unusual than during the exanthemata, yet it is an observation of very ancient date, that those who have been in the habit of bleeding from the nose are not unfrequently seen to suffer from arthritic affections.

Chomel has stated in his essays on rheumatic fever, that Hippocrates said, in the end of the 2nd vol. of the *Proorrhætica*, and that a great many other authors have repeated it after him, that those who had been subject to epistaxis in their childhood and youth were particularly predisposed to arthritic fevers.

Chomel instituted some inquiries, and found that in 72 persons who had had rheumatic fever, 23 had had epistaxis, 19 never had, and in 30 the evidence was so uncertain that it was rejected. The result shows that nearly one-third of those who had rheumatic fever had previously suffered with bleeding of the nose; but as the same learned physician has justly remarked, before this proposition could be taken into consideration, it would be necessary to make similar inquiries of the patients suffering with other maladies. With the object of verifying or otherwise this experience, I inquired of 32 patients who were suffering from rheumatic fever, or who had had the disease, if they had been in the habit of bleeding from the nose?

Having carefully avoided making any selection, simply rejecting the evidence of those who were uncertain as to whether they had or had not done so, the following is the result of my inquiries :—

No. of cases of rheumatic fever.		No. of those that had had epistaxis.	No. in whom epis- taxis had occurred before the fever.	No. during the fever.	No. after the fever.	No. of doubtful, whether before or after.	No. before and after the fever.
32		21	7	2	5	3	7
Males.	Females.						
14	18						

The above table shows that of 32 persons who had had rheumatic fever 21 had had epistaxis more or less. The bleeding occurred before the fever in 7, during it in 2, after in 5, and before and after in 7 cases.

Inquiry in cases of rheumatic fever will show, that the bleeding of the nose had occurred most frequently during youth, but this is not always the case. It will be seen that some had never suffered from epistaxis until a short time before the acute rheumatism came on. A good example of this kind was seen in a man, aged 26, in Guy's Hospital, under the care of Dr. Barlow (who has kindly allowed me to mention this case) for rheumatic fever. In answer to my inquiry if he had been in the habit of bleeding from the nose, he said that for a month before the fever came on he had bled at the nose several times a day, but that he had never done so before nor since. In a somewhat similar case, that of a boy aged 12 years, who was brought to the Metropolitan Free Hospital, and found to be suffering from rheumatic fever, his mother answered to my questions, that some weeks previously he had bled freely from the nose, and that she was sure that he had never done so before that period.

Again, it may be noticed that persons who have had rheumatic fever state that they never bled at the nose before nor during the fever, but that they have frequently done so since they have had rheumatic fever. Such epistaxis, occurring in the latter class of patients, is frequently seen to be associated with valvular disease, as in the following case, for which I am indebted to the kindness of Dr. Wilks. A pale, anœmic boy, aged 12 years, said to have had rheumatic fever seven years ago. For the last twelve months he had had frequent attacks of epistaxis; and during the last three

months had bled profusely from the nose. Has had hemoptysis several times. He was admitted for valvular disease into Guy's Hospital, where he died. *Post-mortem* examination showed a contracted mitral orifice.

In an investigation of this kind 32 cases are far too few to be of much value in establishing the facts by statistics, but they, perhaps, are sufficient to serve the purpose of calling attention to this subject.

Of the twenty-one patients who stated that they had suffered from bleeding from the nose, a few of them had lost blood in this way in large quantities, especially the males; others had lost one or two teaspoonsful, but as the inquiry was not concerning epistaxis as a disease, but of the state and kind of constitution, that such bleeding was symptomatic of, it was clear, that the mere quantity of blood was of little consequence.

It might be argued that, as epistaxis and rheumatic fever are both very common during early life, the apparent relation of bleeding of the nose to acute rheumatism is merely accidental; but if it could be shown that epistaxis is most commonly seen in persons of a certain constitution, and that rheumatic fever often attacks those of the same constitution; and further, that other members of the same family, and who have a similar diathesis, are subject to epistaxis, but have never had rheumatic fever, yet have suffered from some affection allied to the latter disease, then ought not the frequent occurrence of epistaxis followed by acute rheumatism to be considered as something more than incidental?

In order to throw some light on this question, it is necessary to inquire further into the relation that bleeding of the nose bears to other diseases.

Not only is the epistaxis of youth followed by rheumatic fever in after life, but it has been said, that it is likely to be followed by hemoptysis and phthisis in adult age, and the histories of the cases given below would appear to confirm that experience.

The first interesting case is one recorded by the late Sir Henry Marsh. It shows the connection between epistaxis and hemoptysis, and the latter apparently not due to any detectable disease within the chest.

Within the last few days I attended a lady, now in her seventy-fourth year, affected with severe hemoptysis. Thrice before, several weeks having intervened, she was similarly affected, and twice previously to the attacks of hemoptysis, she had bled profusely from the nose. Inquiry elicited the following facts: in early life antecedent to the full establishment of the catamenia, she had been a martyr to idiopathic

epistaxis; at the menstruating period she suffered habitually much pain, and the discharge was very profuse, and at the period of the cessation of the menses, when they recurred at long and irregular intervals, the hæmorrhage from the nose was excessive, and the blood came down in large clots. She had been married at a young age, but never been pregnant. This old lady does not appear to labour under any organic disease; the heart's action and the breath sounds are perfectly normal.

The two following cases are good illustrations of the connection between epistaxis and hæmoptysis:—

Mrs. P., aged 46, complained that she felt weak, and that she had lost flesh. She said that she had a cough, which was very troublesome. The appetite was very bad.

Physionomical Appearances.—Tall, slender figure, small bones, pointed chin, and high forehead; complexion was sallow, with florid cheeks. The teeth were small, very short, and stumpy, but regular; and the incisors of the lower jaw were very much worn down at the edges, the molars were beginning to decay. Eyes brown, hair dark but thin, skin very fair, thin *alæ nasi*, and somewhat thick upper lip; her hands and feet were generally cold. When in good health the appetite was generally regular and good. Of a very hopeful disposition generally, and not particularly excitable. Spirits generally even. She said that when a child she used to bleed at the nose a good deal, but that she had not done so the last 22 years. During menstruation she had always lost a great deal of blood. She had never spat any blood until five or six years ago, when she had brought up two or three teaspoonfuls.

Family History.—Her father had been a builder, and he was a man of very intemperate habits; had drank hard, chiefly of beer and of wine. He was not considered to have had gout, but had had swelling in his joints, which was thought to be rheumatic. At the age of 60 he died, of what was said to be “ruptured blood-vessel of the lungs.” Mrs. P. also said that at first her father spat blood once in two or three months, and then very little, but that one day he suddenly spat about half-a-pint of blood, and two days afterwards spat up a basin full, and that he continued spitting more or less until the fifth day, when, after spitting about half-a-pint, he suddenly died. She further stated that she had had only one brother, who died of inflammation of the lungs, after an illness of five weeks. He had spat a great deal of blood. Three years before her brother died, he had been in the habit of bleeding profusely from the nose, which occurred very often, especially when he used to drink much wine.

Mrs. P. had a son, aged 8 years, whom I was called in to see, who died of acute pneumonia, and he used to bleed considerably from the nose; also another son, who had vesicular emphysema, and cardiac disease, and he, too, bled very freely from the nose; besides these, a third son, who is now living, and he also bled a good deal; but only one daughter, age 28 years, of a bilious temperament, but she had never been liable to epistaxis.

I examined this patient; I found that there was diminished resonance on percussion, over the left apex anteriorly, inspiration feeble, and of blowing quality, with prolonged expiration.

The second case was that of David S., aged 24, a labourer. He complained that he had a troublesome cough, and that his breath was short, especially when he exerted himself; that he expectorated a quantity of frothy phlegm.

The *physical signs* were the following:—Good elevation, but imperfect expansion of the chest; the supraclavicular spaces sank in a great deal with each inspiration; percussion was equally clear at both apices; prolonged expiration heard on both sides; vocal resonance appeared normal; large crepitating hand over the posterior inferior region of the chest.

Physionomical Appearances.—He was a short-built man, florid complexion, bones rather large, but well formed; thorax well developed; blue eyes, light hair, regular features, thin alæ hair, and somewhat thick upper lip; the teeth were regular, and beginning to be worn down in the lower jaw, and some of the molars were decayed.

The Family History.—His father had been a farmer, and had suffered with rheumatic gout; he died at the age of 33 years, of heart disease. His father, when well, had a good healthy colour, and he used to drink “a little.” His mother is now under my care with physical signs of valvular disease of the heart. She mentioned that she had had sixteen children, and that nine of this number had died; three died when infants, one when six years old. The mother further said that her eldest son died when 31 years old, and he spat blood in great quantities; in her own words “he used to raise pints of blood, but he looked healthy; that he spat up blood off and on for two years before he died, and had been in the habit of bleeding from the nose for six or seven years before he began to spit blood.” He never had gout. At one time he used to drink a great deal, but he had not done so during the last few years of his life. She still further said that she had another son who was very subject to bleed at the nose, and which had been the case for the last five or six years, that coming on two or three times in the course of a

twelvemonth, then he usually lost about half a pint of blood at each time; she moreover remarked that, a short time ago, he was laid up for a fortnight, when he had rheumatic fever. David S. said, "in the summer time my nose bleeds a great deal, breaking out two or three times a day, especially if I have been drinking, but I have never spat any blood."

There are several points of interest in the history of the above cases. In that of Mrs. P. the father had been a hard drinker, and which habit, there is good reason to believe is capable of giving rise to degeneration of the vascular tissue. He had had profuse hemoptysis, the children inherited the same tendency from the father, which showed itself in the form of epistaxis in both Mrs. P. and her brother; the latter, unfortunately, had fallen into the same error as his father, which rapidly developed the diathesis into the disease, and he perished at a premature age. The other child, her habits being different, escaped; but still the tendency showed itself in the epistaxis, and in the precurrent hemoptysis, and Mrs. P. transmitted the same liability to epistaxis to all her children, and they had all suffered from it but one, who was a female.

In the case of David S., there is a history, on the part of the father, of rheumatic gout, and probably of alcohol as well. The mother also had the arthritic diathesis. In the children epistaxis was very prevalent; in one profuse hemoptysis, in another rheumatic fever, was seen.

That epistaxis is hereditary in some families has been asserted by so many physicians that it would be difficult not to believe that it is so; but if careful inquiry is made into the medical history of different families, it will readily be seen that such is really the case.

It will probably be better to avoid making any comments at present on these cases, and merely to call attention to the fact.

The observation that there is a connection between the epistaxis of youth and the hemoptysis and phthisis of adult life is by no means a modern one, as the following quotation from M. Kamm's essay entitled, "*Hemorrhagiæ Narium in junioribus, &c.*," will show (College of Surgeon's Library), "*Sic notum est, ætatem puerilem et adultam hemorrhagiæ narium; adultam ad finem vergentem et juventem hemoptysis; virulem et consistentem hemorrhoidibus; senilem vero metu cruento potens expositam esse; forsan quia cerebrum pueris, et adolescentibus, pulmones in juventibus, vasa hemorrhadalia in viris, renes antem senilus.*"

Haan, who wrote before Kamm, in an essay on the same subject, records similar experience.

Hoffman, also, has stated that those who suffer with frequent and copious epistaxis in early years, are often subject in youth and adult life to hemoptysis and phthisis, and in middle age to gravel and gout.*

Again, J. P. French, in his excellent work entitled, "*De Curandis hominum Morbis*," has stated that young people who had been subject to nasal hæmorrhage which had returned frequently, and had been excited by slight causes, have to fear hemoptysis. The same accurate observer has made a remark that very much accords with the history of the cases that I have already given, that hemoptysis is hereditary in some families, and that it is transmitted with the solids rather than with the fluids, and that those that are liable to it succumb in the flower of their age to this hæmorrhage, or to consumption, the latter being either the effect or the cause of the hemoptysis.

Dr. Laycock, in the "*Medical Times and Gazette*," for May 17, 1862, speaking of epistaxis, remarks that it is a symptom of considerable insignificance, although generally overlooked in persons of phthisical habits, and he further says, "I have often noted it as being premonitory of future hemoptysis."

In the same lecture Dr. Laycock states that he had inquired of twenty-five patients, labouring under phthisis, if they had ever bled at the nose, and the following statistics show the result:—

Four had never had either epistaxis or hemoptysis.

Four had had intermittent epistaxis and hemoptysis.

Three had had precurent epistaxis, and, a few months afterwards, precurent hemoptysis.

Three had had precurent epistaxis, but not hemoptysis.

Three had had hemoptysis, but no epistaxis.

In three the histories were very defective.

I offer no apology for introducing these figures here, because they show the relation of epistaxis to hemoptysis, and, further, they may be compared with the following table, showing the result of my inquiry in eighty-three cases of phthisis.

Total number of cases.	No. of those that had epistaxis.	No. of cases in which the epistaxis had preceded the hemoptysis and phthisis.	No. of cases in which the epistaxis co-existed with the hemoptysis.	No. of cases of epistaxis but no hemoptysis.	No. of cases who had had hemoptysis without any epistaxis.
83	52	25	15	12	22

* See a quotation from Hoffman, in Professor Laycock's lecture "*Medical Times and Gazette*," 1862.

In this inquiry, as in that relating to rheumatic fever, no selection was made in the cases, and the quantity of blood lost was not considered.

Although the above table shows that about 70 per cent. of those who were suffering from phthisis, had at some period of their lives been exposed to epistaxis, yet before it could be agreed that 70 per cent. of those who have had epistaxis will be likely to suffer from phthisis, it would be requisite to ascertain how many had been obnoxious to bleeding of the nose, yet had never suffered from either hemoptysis or phthisis. Nevertheless, the figures seem to point out that those who do suffer from this hæmorrhage from the nose are, to a more than ordinary extent, exposed to hemoptysis and phthisis; and this will be further demonstrated when I mention that I carefully inquired of a hundred patients at the Metropolitan Free Hospital, if they had ever bled at the nose, and that I asked the question of each indiscriminately, quite irrespective of the disease with which they were suffering. I found that although many had been liable to bleeding at the nose, at some period of their lives, yet the proportion was not to the extent of 70 per cent.

Moreover, during phthisis it was noticed that epistaxis occasionally occurs just before the hemoptysis. I remember a patient who had well-marked signs of phthisis, both physical and general, and in answer to my question, with respect to bleeding at the nose, he remarked that three weeks before his nose bled a little, a thing it had not done for years, not since he was a boy, and a fortnight previously he spat a little blood.

Several illustrations of this fact could be given, but the following, briefly described, will probably be sufficient.

H. M., aged 28, a labourer at a gas-works, July 20th, 1864. Attended the Metropolitan Free Hospital as an out-patient, when he appeared to be suffering from a mild attack of delirium tremens. He confessed that he had been in the habit of drinking a large quantity of beer. During the course of a week he improved very much and, as he expressed it, thought that he was "almost all right again;" but, on the 24th of August, he again came to the hospital and stated that four days previously he had coughed up a great quantity of bright red blood, supposed to be "about a quart," and he further remarked that he had several times before brought up a little blood, but never so much as at this time. I inquired if he had been in the habit of bleeding from the nose, when he answered, "I have been very subject to it, and sometimes my nose will bleed for several minutes together; last Thursday my nose bled very much in the

morning, and in the evening of the same day I brought up the bright-red blood."

The preceding examples are probably sufficient to show that there is a relation between hæmorrhage from the nose and hæmorrhage from the lungs, and that the former may in some cases go before the latter, and be as it were a warning.

But that a great many children and adults bleed from the nose, and yet hemoptysis does not follow, is a fact beyond all doubt. Yet while some persons state they and several of their brothers and sisters used to bleed frequently from the nose, and yet are all living and well, others remark that they have had the bleeding, and that several members of their family have died of phthisis, especially as they approached puberty; in fact, when the family history is such as to lead to the conclusion that, there is a strong hereditary tendency, and where such hereditary tendency points to those diseases that epistaxis is believed to be premonitory of, it will probably be considered that although some persons who had been liable to this epistaxis had escaped, yet it does not follow that others would be equally as fortunate; therefore, the premonition ought not to be neglected, and especially when hæmorrhage from the nose occurs in early adult life.

Again, clinical experience has shown that some who were exposed to frequent epistaxis in childhood and in youth, suffered from recurrent hemoptysis in manhood, and that such hæmorrhage from the lungs may continue for a great many years; but in other somewhat similar cases, this kind of hemoptysis appears to be followed, as M. Trousseau says, by "*une mouvement fluxionnaire qui peut déterminer l'évolution d'une phlegmasie plus ou moins dangereuse.*"

There is now, and has been from time to time during the last two years, under my care, a man aged 28 years, who has spat blood in considerable quantities, this returning every month or five weeks, for the last five years. Yet he stated that he felt very well and had not lost flesh. I examined his chest very carefully several times, and could not detect any indication of tubercular or other mischief. One day about two months ago he returned to the hospital when I again examined him, and detected for the first time consolidation over the right supra-scapular region. I ascertained from this patient that he had been in the habit of bleeding freely from the nose when a boy.

This recurrent hemoptysis is sometimes seen in several members of the same family, which would seem to denote that it is due to some diathetic influence.

At the same time that the general symptoms in examples

of this kind are such as are usually considered to be indicative of scrofulous phthisis, yet the histories of the diathesis of the patient tend to show that although there may be disorganisation of the lungs, yet the tissue affected is not that of the mucous system, as in genuine scrofula, but of the vascular system.

Besides these, some cases have come under my notice which have led me to think that those who in childhood suffer from frequent bleeding at the nose may, under certain exciting causes, be liable to pathological changes in the lungs, without any previous hemoptysis.

I propose to give two cases which will illustrate my remarks.

September 20th, 1864.—I was asked to see Master A., aged 10 years. His father stated that, two days ago when he was at school, and in the act of playing, he ran against a piece of wood, and hurt himself in the belly; the pain, however, soon passed off, and after an hour he began to play as usual. But in the evening of the same day he felt sick and vomited his tea. Next day it was remarked that he was very heavy and dull. He said that he did not wish to play, and wanted to lie down. His breathing was noticed to be quick, but otherwise no attention was paid to it. He had no desire to eat anything, and his skin was hot.

September 20th, he was sent home. When I first saw him I noticed that his face was flushed, his eyes looked heavy, and he had a peculiar nervous manner, as if he were making a great effort to appear well, without having the physical strength to carry it out, such as is seen in the early stage of continued fever. His nostrils expanded and contracted very quickly. His tongue was covered with white fur. I remarked that I was sure that he was ill from his manner, when his father said, "I feel certain of that, for he appears so languid, has no desire to do anything, and he has not the least appetite, which is a very unusual thing for him." He was put into bed, and I examined the abdomen, but he did not complain of any pains on pressure, excepting slight tenderness in the left illiac region.

Nor had he the anxious look that is usually seen in abdominal diseases. The skin was hot and dry; his pulse quick and full; respiration also quicker than usual, but not strikingly so. I listened to his chest, but did not detect anything more than that the respiration was rather more feeble over the left lung posteriorly than over the right, but I did not notice any increased dullness. As it was late in the evening, and I thought I detected a rash, it occurred to me that he might be sickening for scarlet fever. Next day I found

him much the same, but when I again carefully examined the chest, I detected at the upper half of the left supra-scapular region diminished resonance on percussion; and during free respiration, tubular inspiration and prolonged tubular expiration, both having a rather metallic quality. Also the vocal resonance was so much increased that there could not be any doubt that there was some solidification. The rest of the chest appeared to be normal. He was said to have very little cough and no expectoration.

Physiognomical Appearances.—His figure was rather tall for a boy of his age. Small bones, chest well formed, regular features, thin alæ nasi, and rather thick upper lip; teeth sound and regular; hair light, eyes blue, fingers straight and tapering. It was remarked that he was a very sensitive and a very good intelligent boy; that he had always enjoyed good health, and appeared to be very strong. His face was so sunburnt that I could not judge what complexion he had, but the skin over his chest was very fine and thin. As a rule, his appetite was very regular and good. On inquiry I found that he had been very subject to bleeding from the nose for some time past, and some times it had bled very freely. He was very poorly for a week and then gradually improved. It is not necessary to mention the progress of the case, but is sufficient to say of the family history that he has one brother who is healthy, but not very strong. Father is supposed to be healthy. His mother is said to have died of valvular disease of the heart, and her father was a great martyr to gout. It was not known that she had ever had rheumatic fever.

Another example of this kind occurred in the family of Mrs. F., whose own case has been already given in this paper.

A slenderly made, intelligent, sensitive boy, who had always enjoyed good health, but like all his family, had been very subject to frequent epistaxis. One day he was very much frightened by a man threatening to shoot him. Immediately afterwards he came to his mother showing great alarm, and, as she expressed it, he was so frightened that he shivered again. Next day he was not very well, but in capital spirits, and therefore no notice was paid to it; but in the course of the second day he was very sick and vomited, when his mother, thinking the stomach was out of order, gave him a little castor oil. The third day he appeared much the same, and on the seventh day of his illness I saw him. His breathing was very quick, the skin burning hot, a short hacking cough, no rust-coloured expectoration, but the phlegm was very adhesive. Over the whole of the posterior part of the left side there was great dullness on percussion. Loud tubular breathing marked bronchophony, with increased tactile

vocal resonance. No crepitation could be heard anywhere. He had no hemoptysis.

But in order not to make this report too long, I will merely state that he remained very ill for three weeks, when he was seized with shivering, shortly after became delirious, and a few days afterwards died.

At first sight it might appear that the occurrence of this pneumonic inflammation in one subject to epistaxis was only accidental.

In order to show that is something more than an incidental connection between the epistaxis and the lung disease seen in the two last cases, I would contrast the natural history of the latter with the natural history of those who had "bleeding."

1. The records show that in both, the patients were equally well made, regular features, mostly fair, intelligent, and highly sensitive, and that they had usually enjoyed good health.

2. That both had been very subject to epistaxis.

3. That in both there was a history of the arthritic diathesis.

4. That both, owing to their great sensitiveness, were liable to suffer from disturbances of the vaso-motor system, the consequence of emotional excitement, as shown by the occurrence of epistaxis or of hemoptysis after great fear, anger, &c.

Lastly. Knowing that those who have bleeding in the earlier years are very subject to inflammations in the lungs, knowing that in young persons of the arthritic diathesis severe shocks to their sensitive nervous system may be followed by pathological changes in certain tissues, as shown by Chomel. Taking all these things into consideration, it will probably be admitted, that these two cases so closely corresponded in many respects with those in which there is "bleeding," that the repeated epistaxis was indicative of defective nutrition of the vascular system. Rapid tissue-changes may be expected to follow on any impairment of the general health in persons thus predisposed.

A Case of Poisoning, caused by Chewing Tobacco. By WALTER SCOTT, M.D., Edin., Clitheroe, Lancashire.

RICHARD EDMONDSON, aged 17 years, a piecer in a cotton-mill, was seen to leave home about half-past six on the night of Friday, October 28th, apparently quite well; he returned about half-past nine on the same night looking ill and pale. On being asked what was the matter, he said he was sick and

had a pain in his stomach, after which he asked for some cold water, of which he drank, and then went to bed. In the interval between his leaving home and his return he had walked with a companion, for a distance of half a mile, to a shop, and purchased half an ounce of Limerick roll tobacco, and an ounce of bird's eye tobacco. The evidence at the inquest subsequently showed that he had smoked two pipes of the bird's eye tobacco, and chewed about two-thirds of the Limerick roll tobacco. He was seen by one of the witnesses, about nine o'clock, leaning against a wall, and vomiting and trembling greatly; upon an inquiry as to the cause, deceased said *that he had been chewing tobacco, and had swallowed the spittle he should have spit*; on reaching home he complained of being stiff.

His mother saw him about six o'clock on the following morning (Saturday); he was then down stairs with his clothes on, having been assisted to dress by his brother, and appeared stupefied and drowsy. He was sitting on a chair apparently asleep, and his mother awoke him, gave him some senna and cream of tartar, and helped him to go to bed again. All that he had eaten on the previous night was an apple, and during the whole of Saturday he had nothing excepting a little cold water and some tea. About one o'clock his limbs began to be very stiff; the drowsiness continued to some extent, but not so much as before. The patient continued in bed all day, and complained of his limbs aching; about three o'clock on Sunday morning he was seized with convulsions. I was sent for early on Sunday morning, when I saw him for the first time. He was then perfectly unconscious, the features were sunken, the lips were drawn back, showing the teeth, which were covered with dark sordes, the tongue was dry, parched, and covered with a blackish-brown crust, the pupils were fully dilated and quite insensible to the light of a candle held close to the eyes; there was no pulse at the wrist, the sounds of the heart were inaudible, and its movements could scarcely be felt. The patient moaned frequently, was restless, and placed his hand to the pit of his stomach, frequently drawing up his legs, as if he suffered great pain in the abdomen; the head was firmly drawn back, with rigidity of the muscles of the posterior part of the neck. I saw him frequently until his death, which took place on the following Friday afternoon, nearly a whole week from the time when he chewed the tobacco. No important change took place from the date of my first being called to see him. He never became conscious; the pulse improved but remained feeble and thrilling. The pupils were somewhat less dilated, but remained inactive. At times great difficulty of swallow-

ing was present, and there were constantly returning rigid tetanic spasms, the muscles of the back being principally affected.

The treatment consisted in the administration of stimulants, such as brandy, strong coffee, and sesquicarbonate of ammonia, and the application of sinapisms over the regions of the heart and stomach. So completely was the patient under the narcotic influence of the tobacco that I feel certain that he would have died on the Sunday afternoon if I had not succeeded, to some extent, in restoring the heart's action.

The chief *post-mortem* appearances, forty-eight hours after death, were the following. The body was rigid and emaciated; there were early signs of decomposition over the upper part of the chest and the lower part of the abdomen, and blueness of the nails. These two latter appearances were noticed by the man who laid out the body, *within a quarter of an hour after death*. On opening the stomach I found it to contain about an ounce or more of dark grumous matter, free from any particular odour. The mucous membrane of the cardiac orifice and large end of the stomach were highly congested and inflamed, with red patches of inflammation along the larger curvature, and at the pylorus. No effusion of blood, ulceration, nor perforation were found in the intestines. The spleen was considerably enlarged, the kidneys appeared of a normal size, and healthy, but were not removed from the body.

The lungs were congested, but otherwise healthy. The heart was large, pale, and flabby, and the right auricle was nearly full of very black liquid blood. On opening the head the blood-vessels of the brain were found to be, everywhere, very greatly enlarged and distended with dark blood; about half an ounce of extravasated blood was found between the hemispheres; there were no adhesions between the membranes of the brain, nor serous effusion in the ventricles.

ST. THOMAS'S HOSPITAL.—In the Court of Chancery, on November 23, the Lord Chancellor dismissed the appeal brought forward by the Corporation of the City of London to be allowed to participate in the selection of a site for the new hospital with the donation governors, a body to whom the corporation governors, by agreement in 1782, ceded their rights to the management of the affairs of the hospital. The advocates of that very bad site, Stangate, will now be victorious.

REVIEWS AND NOTICES OF BOOKS.

Practical Observations on the Hygiene of the Army in India: including Remarks on the Ventilation and Conservancy of Indian Prisons, with a chapter on Prison Management. Illustrated with Wood-cuts. By STEWART CLARK, M.R.C.S., Eng., Inspector-General of Prisons, North-West Provinces, India. Pp. 162, 8vo. London: Smith, Elder, and Co. 1864.

THE last few years have been prolific in works having for their laudable object the amelioration of the condition of the soldier, most of which owe their origin to the zeal and energy of the officers connected with the Medical Department. To this collection of valuable works, that before us is a very useful addition, embracing, as it does, much of the experience of one who has held, and is still holding, a very responsible post, which demands constant attention to the principles and practice of hygiene. Mr. Clark is already favourably known in India for his reports on Prison Management; and his great experience in this special department, as well as his military experience, seem to point him out as peculiarly qualified to suggest measures with the view of improving the condition and the prospects of the European soldier in India. This work is an amplification, as regards ventilation, drainage, &c., in the tropics, of a paper brought by the author, in 1863, before the British Association. To that, however, he has made important additions, in all that has reference to the welfare of the British soldier.

In his preface, Mr. Clarke makes some judicious remarks as to the all-important characters of pure air, which will render the Scotch highlander and the Indian palanquin-bearer equally muscular and able to endure fatigue upon meagre diet, and the want of which will rob the highly fed artizan in cities and factories of all strength and vigour. In the subsequent parts of his work, indeed, he lays frequently stress upon this point, how to obtain the purest air, as the cardinal point in hygiene; and while he fully recognises other desiderata, such as pure water, the nature of the soils and food, he evidently considers them as, where not subsidiary, at any rate secondary in importance, to pure air. He thinks that this point is often in danger of being overlooked, and that too much prominence has been given to other agents, notably to impure water, as causes of disease. In this view we do not entirely coincide with the author, for it is only recently that the great, if not

paramount, importance of uncontaminated water has become generally established. It was only after the revelations of the great impurity of much of the water supplied by the London water companies and of the London wells, the apparent identification of the impure waters as the cause of cholera in more than one epidemic, and of the agency of contaminated water, as a probable cause of typhoid fever and other zymotic diseases, that the profession took full cognizance of the importance of pure water. We must do our author the justice to say, that he is ready to acknowledge that importance, although he is of opinion that in many epidemics, particularly in the case of cholera, popularly attributed to drinking impure water, as among the crews of vessels in harbours like Calcutta and Bombay, the real cause was impure air. The cause of epidemics would often, if investigated, be found to be the foul air of overcrowded barrack-rooms, jails, ship-holds, and other places. In the author's experience, in such cases, foul waters may or may not have been in use, or if in use, may have been inoperative, but invariably the air breathed, by those first attacked, at any rate, had been fouled by carbonaceous and organic impurities, derived chiefly from the excreta of the lungs of human beings.

After all, there will be found little difference of opinion among sanitarians as to the relative importance of the several causes of zymotic disease, for we must all acknowledge that both air and water may be relatively primary or secondary causes of all epidemic affections, which do not depend upon specific contagion. Either agent may introduce the germs of disease, and either agent may render the system susceptible to epidemic influence, to infection, or to miasma. Mr. Clark has done good service by directing attention in a very marked manner to the universally deteriorating effects of foul air. In the first chapter he discusses the subject, alluding to the evident danger, in overcrowding, of the re-introduction into the blood of one of its own elements in a putrid state through the lungs; and to the effect of the cooler air of the early morning, loaded with excrementitious matter, upon lungs and skin, in giving origin to cholera, dysentery, fevers, and other diseases of the zymotic and epidemic classes. He states that at this period (from about 2-3 A.M.) when the incubation of cholera takes place, there is a combination of causes in action, for the vital energy, the atmospheric pressure, and the electric tension, are all at the minimum. It is at this time, also, that collapse often may be expected, after exacerbations of fever; and if the importance of this point be borne in mind, the medical officer,

by prompt action, may arrest a fatal result, or may check the advent of insidious disease. The author, with most other sanitary reformers, looks upon overcrowding as the great evil to be avoided, and instances the effects of this cause, and of its absence, in the great difference that is found in respect to salubrity between the central jails in India, often full to overflowing, and the district jails, in which there are only located a moderate number of persons, general sanitation being the same in both cases. While epidemics are not rare in the former, and are sure to follow the prevalence of any similar disease in the neighbourhood, they are now almost unknown in the district gaols, although they are often present in the immediate vicinity.

Mr. Clark pays especial attention to the great need of ventilation for tents, the crowding in which he considers more hurtful, on account of narrow space, than even in barracks. He states that the amount of cubic space allowed the soldiers in camp, by regulation, is not above 125 cubic feet for each, and that this condition has not hitherto been compensated by an efficient mode of supplying pure air.

In his second chapter, he describes the means now in use, and the alterations he proposes for the ventilation of barracks and tents, particularly in hot countries. One great difficulty has to be overcome, viz., the little difference which exists between the temperature of the outer and the inner air, particularly in hot weather. It is on this account chiefly, that, with large bodies of men, natural ventilation, which only makes use of doors, windows, and flues, is insufficient. The same may be said, the author thinks, regarding the "*Vacuum Method*." It will be found impossible to supply pure air by the exhaustion of the foul air, in most cases. Artificial ventilation being thus necessary, there only remains, as applicable to India, the "*Plenum Method*" of ventilation. The author gives a full description of the apparatus, which is most suitable, and he also suggests certain modifications of the methods now so successfully applied elsewhere. One of the most notable examples of ventilation, apparently perfect, is to be found in St. George's Hall, Liverpool, which is ventilated upon the *Plenum* principle. Mr. Clark introduces a series of diagrams, illustrating his plan. He proposes to draw the pure air from a considerable height above the ground, say 40 feet, for passage into the main flue. It is then pumped into the interior of the buildings, either by a steam-engine, or by fans brought into action by horse or bullock power, according to the size and nature of the buildings. In many seasons and localities, it will be found requisite that the air should be either cooled or warmed. To be cooled, the air must be

drawn through a refrigerating apparatus, placed in a distinct apartment. For warming, so essential in cold weather in some portions of the Indian plains and in the hill-barracks, the author has found nothing better than hot-water pipes. The foul air must be allowed exit direct into the open air; for this purpose, the plan of open ridges, under the roofs of the buildings, as at present in use, is the best. For the ventilation of tents, in which there is generally a want of openings for the egress of foul air, the author recommends their being supplied round the pole in single poles, and on each side of the ridge in double poles, to form a roof like the roof with open ridge in barracks. He remarks upon the urgent necessity for such an arrangement in habitations constructed of canvas, which very rapidly absorbs moisture and atmospheric impurities. In these it will also be advisable to supply air, by propulsion, for which it will be necessary to employ a system of fans and driving wheels, which can be moved from one encampment to another. The troops should also carry with them their bedsteads, which must be of iron and made to fold, and these are to be raised well above the ground.

In the third chapter the author discusses the subject of supply of pure water. He insists strongly on the necessity of avoiding, for drinking purposes, not only the water of shallow wells and tanks, but also the surface water of the deeper wells, particularly if they have long been disused, and suggests plans for filtering the fluid before use. For raising the water he recommends an apparatus on the principle of the "California lift," which may also be used in the supply of cold air, or in ice-making, &c.; and he states that a pair of five-inch cylinder pumps will raise a quantity equal to the supply of fifty gallons a day per man for 1,200 men. There can be no doubt that a constant supply of pure, cold water in the barracks would be of all means that most likely to reduce the consumption of spirituous liquors among the troops. The author's arguments and statements as to the amount of filth and impurities in drinking water which the human system can endure without material injury, as he supposes, will be found interesting; founded, as they are, on an extended experience in his capacities of ship and army surgeon and inspector of Indian prisons. He allows, however, that should water contain a large quantity of nitrates formed from the oxidation of ammonia derived from recent animal matters, it may become an active poison. We must go farther than the author on this point, as we believe that water containing much of the product of excrementitious matter may cause not only fevers, dysenteries, with other ordinary diseases of the zymotic class, but also cholera under

certain circumstances. For the production of some of these diseases, in the epidemic form, it is possible that a combination of foul air with foul water, and possibly with certain morbid conditions, as mal-nutrition, is requisite.

In succeeding chapters Mr. Clark treats the subjects of the soldiers' food, conservancy of barracks and prisons, drainage, supervision, construction of barracks, financial results, descriptions of apparatus, the concluding chapters containing the recommendations regarding the construction and management of prisons which have been suggested by his special experience. On these several points he has entered minutely into details, and has illustrated his views by many plans and diagrams. He insists upon the need which exists for a better system of cooking for the troops, that which too often is at present in use having the effect of rendering the food not only innutritious, but positively injurious; also upon the necessity of supplying a more varied but less stimulating diet, occupations for the bodies and minds of the men, and the various ameliorations in their condition which have been suggested or brought into operation of late years.

On the question of sewerage he advocates not simply the "dry system" as opposed to the "wet" system (of applying large quantities of water, which carries the sewage away, but fouls the soil through which it runs, and the streams into which it is emptied), but in addition, the free, constant, and prompt application of carbolic acid and carbolate of lime to all fœcal and urinary excreta. The disinfected sewage should, as soon as possible, be carted away to be used, sufficiently diluted, as manure on farm-land, which should be established in the vicinity of all barracks and jails. The author insists upon the necessity of preventing drains from communicating with the interior of any habitations, and of having them tested very often for foul air. Should this exist, and flushing with water be not enough to disinfect, a blower and apparatus must be used for the purpose of sending through them a strong current of air, loaded with the fumes of carbolic acid.

In describing the construction of barracks, Mr. Clark lays great stress upon the necessity of providing a due amount of ground-space. Each man should be allowed 72 square feet. We think that the amount stated is the least that is compatible with health, in a hot climate, and that the amount of superficial space which exists generally in the barracks of the British Army, we believe about 56--60 square feet on the average, is scarcely sufficient even in the cooler latitudes. As the author says, "without sufficient area, no amount of air piled above a person's head will render his position either

comfortable or healthy." Hence we are inclined to think, that the immensely lofty single-storied barracks, of late construction in India, were built on a wrong principle. However, there would be found no difficulty in utilizing them by forming an additional story, the upper rooms to be used at night, and the lower as day-rooms. With a proper system of ventilation, it would appear that no apartment need be above eighteen feet in height. In the place of the very expensive large barracks in India, built on the single-storied principle, the author suggests the substitution of a large number of small houses, which could be built at less than half the expense, ample provision for the married men and families being included in his estimate.

To carry out this change, it would be necessary to make a considerable outlay in the first instance. Mr. Clark estimates the probable cost of buildings, machinery necessary for ventilation, the supply of water, and an efficient system of sewerage, for an army of 105,000 men, to be about £720,000; but he calculates that such would be the gain to the Government in the diminished cost for recruits that would not be wanted, and in the saving in hospital charges, &c., that even that large amount would be more than made up in two years.

Of course, the first consideration with all sanitary reformers is the moral and physical amelioration of our fellow subjects, but we are not the less indebted to those whose practical minds solve the difficulties of carrying out our philanthropic projects.

The tenth chapter contains a description of various apparatus for the ventilation of air and the filtering and cleansing of water; as well as of an improved form of an ambulance cart, for sick and wounded soldiers; and different suggestions on sanitary questions.

The eleventh and concluding chapter contains some valuable hints, as regards the construction of prisons, their management, the employment of the prisoners on work which may be salutary for their moral, as well as physical, condition, and which, at the same time, may assist in paying the State for the cost of their maintenance.

In conclusion, we may state our conviction, that the Home and Indian Government may well feel indebted to those medical officers, among whom the author of this practical work may be reckoned as not the least distinguished, who have contributed much scientific knowledge and sagacity to the solution of the problem, How can an European Army be sustained in India? Already the loss of human life has been diminished, chiefly by the agency of the medical depart-

ment; and we may hope that, now that the superior authorities are aware of the absolute necessity of limiting the numbers of the British soldiers in India, they will become increasingly anxious to carry out such improvements in hygiene, as will be suggested to them from time to time by writers of experience like Mr. Clark, and by the sanitary commissions lately instituted in the several presidencies.

Clinical Lectures and Reports by the Medical and Surgical Staff of the London Hospital. Vol. I, 8vo., pp. 517. London: Churchill.

THERE are few books more valuable to the busy practitioner than good clinical reports; when the professional attainments of the author are high and his opportunities for the observation of disease extensive, they invariably furnish trustworthy types of disease, the diagnosis and treatment of which reflect the physiological and therapeutic knowledge of the day; affording but small opportunity for theoretical speculation, they are in the main frequently safer guides than more systematic works. The volume before us is an excellent example of all that is good in this kind of work; the field of observation from which the cases are selected is sufficiently extensive, the talent and zeal of the authors unquestionable. The characteristics which render a book of this kind valuable are precisely those which afford the least ground for criticism; we shall therefore content ourselves with a brief *resumé* of its contents, believing that thereby we shall discharge our duty to our readers better than by a more critical examination of reports which in the end must speak for themselves.

The volume consists of collections of special cases and articles of a more miscellaneous character, in which are set forth the more important facts that have fallen within the observation of the authors in the course of their clinical inquiries; statistics of the general hospital, and of the maternity department. To some of them we proceed to refer more particularly.

Mr. Hutchinson contributes five papers, three on affections of the skin, one on cerebral amaurosis, and a miscellaneous selection from his clinical lectures. The papers on diseases of the skin relate to leucoderma, true leprosy, and pemphigus. In the first the author enters minutely into the diagnostic marks by which leucoderma is to be distinguished from the far more serious disease, bronzed skin, and from pityriasis versicolor. He says:—

"In MORBUS ADDISONII we have a diffused darkening of the skin, with spæcemia and greatly enfeebled health. The skin becomes darkest on the parts naturally supplied most liberally with pigment, and on those exposed to the sun and air, or to accidental irritants (blisters, &c.). A disagreeable negro-like odour often attends the patient. Nowhere except on mucous surfaces are there any abruptly margined patches.

"In PITYRIASIS VERSICOLOR, we have dark-brown patches with well-defined spreading borders on normally tinted skin. The disease is rare in the aged, and never occurs in children. The patches rarely occur on other parts than the chest, back, abdomen, shoulders, and upper arms. A cryptogam can be readily demonstrated by the microscope.

"In LEUCODERMA we have perfectly white, well-deformed patches, with spreading edges, on a brown skin. The disease may affect any part, and is common in the fore arms and hands. It may occur at any age. There is no cryptogam."

The paper on leprosy contains the history of four cases, in all of which the patients either were born or had resided in the West Indies. Of relapsing pemphigus Mr. Hutchinson relates the history of numerous cases, and the results of various methods of treatment. The conclusion at which he arrives as regards treatment is, that whilst the disease is most intractable under any other remedy, it yields readily to arsenic, the truth of which is fully confirmed by our own observation of this disease.

An admirable collection of cases of cerebral amaurosis, illustrating the varied features of this disease, with more especial reference to the use of tobacco as its supposed cause, is also contributed by Mr. Hutchinson. Our space will not permit us to do more than quote the author's conclusions. He says:—

"I have wished to afford the reader the opportunity of looking broadly over the whole group of those cases in which, clinically, amaurosis and white atrophy are the prominent symptoms. From this survey we have arrived at facts—1st. That unsymmetrical amaurosis (no doubt in common with disease of the optic nerve, embolism, &c.) is equally frequent in the two sexes. 2nd. That of the symmetrical cases a far larger proportion occur in men than in women. 3rd. That in women we not unfrequently find derangement of menstrual functions, acting apparently as the cause of amaurosis. 4th. That in a few cases in men we obtain the history of sexual excesses and of diminution of sexual vigour, and also find varicocele co-existing with the amaurosis. 5th. That there is no reason for assigning any special male occupation as a probable cause, nor any for thinking that syphilis or blows on the head often stand in that relation. 6th. That in a very considerable number of cases no probable hypothesis can be given as to the determining cause of the failure of sight, and that almost all those unexplained cases (symmetrical and well marked in all their stages) occur in men who have been accustomed to smoke."

The author does not think it is yet, by any means, satisfactorily made out, that the use of tobacco is the cause of the form of amaurosis, nevertheless his facts show to a somewhat startling extent how, very frequently, the sufferer was addicted to the use of this narcotic. To this peculiarity,

the association of the disease with the use of tobacco, the author's cases serve to direct the course of future inquiry as to its cause; should this tend to establish in the majority of cases the connection of the habit of smoking with the disease, whilst it will not demonstrate their relation as cause and effect, it will raise strong presumption that dangers attend the use of the narcotic, not hitherto generally suspected.

A miscellaneous collection of cases and extracts from clinical lectures concludes Mr. Hutchinson's contribution to the volume.

Dr. Down gives a short paper on the therapeutic value of sesquicarbonate of ammonia in scarlatina, and an interesting case of polysarcia treated with most satisfactory results by an almost exclusively animal diet, the patient improving in health as the obesity diminished.

Dr. Davies contributes a case of aneurism of the innominate, and thirteen cases of acute rheumatism, treated solely by free blistering in the neighbourhood of the affected joints, in all of which recovery was complete in a much shorter time than under the ordinary methods of treatment, marked relief following almost immediately on the establishment of serous discharge from the blistered surfaces. Should the author's practice prove equally successful in the hands of other practitioners it will constitute a further step in the successful treatment of this serious malady.

Mr. Maunder records several cases of hospital gangrene, and speaks highly of the value of irrigation with warm water, with which may be mixed some disinfectant. Six cases of rare fractures and dislocations of the vertebræ, by Mr. Curling, present points of interest worthy of attention.

Amongst the many interesting papers in this volume, those by Dr. Jackson deserve especial mention, viz., on the method of studying the diseases of the nervous system; a collection of cases illustrative of its diseases, especially those accompanied by paralysis of the face; and, lastly, a valuable series of cases and observations on loss of speech, associated with hemiplegia; by loss of speech the author means a loss of the faculty by which a co-ordination is established between ideas and the form of words by which they are expressed, not the mere power of utterance, which may be lost in a variety of ways apart from disease of the brain; this distinction is all important to the due comprehension of his views.

Dr. Jackson recites the opinion of Broca as to the existence of a special organ of articulate speech, which he (Broca) locates in one of the convolutions on the left side of the brain

near the fissure of Sylvius ; he then gives details of the symptoms in upwards of thirty cases of loss of speech accompanied by hemiplegia, in all of which, with one or two exceptions of a doubtful character, the paralysis was on the right side ; in the exceptional cases there was some reason to believe that there might be disease on both sides of the brain ; embolism, affecting the left middle cerebral artery, was the probable cause of the affection in the majority of the cases recorded. Apart from the merely medical interest of these cases, they have a special interest to the physiologist, tending, as they do, in a material degree to support the views of Broca. Should future research establish the fact that loss of speech is only associated with disease of the left side of the brain, whilst it will doubtless tend to shake our faith in the doctrine of the duality of the brain, it will nevertheless constitute an important step towards the elucidation of the functions of this complex organ, and give a renewed stimulus to the study of cerebral physiology. To do this, however, something more must be done than the mere accumulation of pathological evidence, however valuable it may be.

A careful examination of the comparative anatomy of this portion of the brain must shew us what corroboration is afforded by the state of development, or otherwise, of this structure in the lower animals. Without the aid of comparative anatomy it is dangerous to place too much reliance on pathological conditions for the establishment of physiological facts ; destruction of function by disease of a structure is no positive proof that the function resides in that part, it may only be a link in the chain of action, the true motive power belonging to remote and perhaps unsuspected parts. Dr. Jackson's cases are most instructive and cannot fail to stimulate further inquiry, the result of which we sincerely hope may confirm the reputation of so careful an observer as Dr. Jackson evidently is.

A series of miscellaneous papers, admitting of but little more than an examination of their titles, make up the remainder of the volume. Mr. Couper records an interesting case of femoral hernia, in which there was no sac, and a curious case of dislocation of the jaw. Dr. Ramskill gives the particulars of three cases of dilatation of the left ventricle of the heart, associated with difficult articulation, and two interesting cases of algesia with hyperæsthesia. Under the title of Gleanings from the Field of Observation, Dr. Andrew Clark records some interesting facts in reference to morbid conditions of the urine.

A case of some interest in a medico-legal point of view is reported by Dr. Woodman. The lungs of a new born child

which had probably never breathed, found in the sea, were of a uniform rosy colour. This Dr. Woodman attributes to the influence of the salts in the sea-water. The case is of importance, seeing that to some extent it simulates the condition usually regarded as associated with respiration.

Mr. Heckford and Dr. Barnes contribute an interesting series of *post-mortem* examinations of still-born children and infants dying shortly after birth. Dr. Barnes considers compression of the body of the child and arrest of the placental circulation a fertile cause of still-birth. Mr. Heckford gives the statistics of the maternity department for six years, and Dr. Powell the general statistics of the London Hospital for 1863. Mr. Little contributes a paper on the Schleswig-Holstein campaign, from a medical and surgical point of view. This interesting volume is one which cannot fail to be regarded as a valuable contribution to the literature of our profession.

PAMPHLETS.

The Painless Extinction of Life in Animals Designed for Human Food. By HENRY MCCORMACK, M.D. Pp. 12, 8vo. London: Longman & Co., 1864.—In this pamphlet, which is addressed to the Royal Society for the Prevention of Cruelty to Animals, Dr. McCormack, after dwelling upon the boundless misery and pain caused to animals intended for human food by the present clumsy and slow method of killing them, proposes the plan of destroying them more quickly, and without suffering, by making them inspire carbonic acid gas in a chamber fitted up for the purpose. The apparatus which he suggests is simple and cheap, as the gas can be readily generated in any quantity by the action of sulphuric acid on chalk. The gas could then be conveyed through a pipe into the chamber in which the animal destined to be killed is placed.

While giving Dr. McCormack the highest praise for the humane disposition which he shows in making this proposition, we consider it as open to objection. Has the author satisfied himself, by actual test, that the flesh of an animal killed in this manner is as fit for human food as when it is destroyed in other ways? Oxen or sheep, when brought from abroad, often die during a storm, asphyxiated by carbonic acid gas, owing to the exclusion of atmospheric air from the holds of the ship, in consequence of the hatches being fastened down.

When they have died in this manner they soon undergo decomposition, and are wholly unfit for food.

The other modes of killing animals for the butcher's shop are generally pithing, effected by pricking the spinal marrow so as to produce instantaneous death, and the production of collapse of the lungs by making an opening into the chest between the fifth and sixth ribs, when the lungs instantly collapse, and the animal dies in a very short space of time. Either of these methods, if properly performed, appears to us more suitable than Dr. McCormack's plan.

We agree with the author that the real horrors of the slaughterhouses throw those of vivisection completely into the shade. We hope that his remarks will have due weight with the members of the Society to which the pamphlet is addressed, some of whom not long since thought fit to attack physiologists in no measured terms, on account of the alleged cruelties committed in the operations which they performed, forgetting that many of the members, fond of field sports, would cause in a day's shooting, indulged in for their mere gratification, more pain than a physiologist working for the improvement of science would occasion in a year, as the latter would frequently render the animal insensible by the inhalation of chloroform before commencing his experiments.

A Lecture on the Sanitary Condition of the Town of Ulverston.—Delivered by E. LANKESTER, M.D., F.R.S. Pp. 16. Ulverston: W. Stone.—A very instructive and interesting lecture delivered at Ulverston, on the 3rd of November, by the Coroner for Middlesex, at the request of some of the inhabitants who are desirous of improving the sanitary condition of the place by adopting the Local Health Act. It certainly is full time that active measures were taken to diminish the present high death-rate of the town. Although situated in a very salubrious district, in the immediate vicinity of the lakes, Ulverston possesses the unenviable notoriety of being one of the most unhealthy places in the kingdom. In 1851, the death-rate was only 21 in 1000; in 1862, it reached 28 in 1000; in 1863, it was 25, and during the first nine months of the current year it amounted to 35 in 1000. To check this terrible mortality is the laudable object of some of the principal inhabitants, and they could not have got a better champion for their good cause than Dr. Lankester. Steadily aiming at one point, the improvement of the health of the town, he demonstrated by statistics that there is no real reason why the death-rate should not be reduced to that of the healthiest districts, and showed the defects to which the insalubrity of Ulverston is due. There is a total absence

of any system of sewerage, and the beautiful river which runs through the town is choked with filth; the cloacæ are in many instances mere open privies, and open cesspools taint the air with their poisonous emanations; the water supply is inadequate, being chiefly obtained from pumps (although there is a company which supplies wholesome water), so that the water is largely affected by the percolation which takes place from the cesspools to the wells; in many of the houses the rooms are too small, and ventilation appears to be often ignored altogether. The lecturer enumerated several towns where the Local Health Improvement Act had been introduced, and proved clearly that the diminished death-rate in these towns was obtained by the various sanitary improvements effected under the provisions of the Act, and that equal advantages could be procured in Ulverston. Calculating the value of a human life at the very moderate computation of £50, Dr. Lankester told his hearers that by the extra mortality, they had lost during the past ten years lives that might have been saved, amounting to £30,000, a sum equal to the whole rateable value of the property in the town. With excellent tact, he interspersed his lecture with good-humoured remarks so as to amuse as well as instruct his audience. We hope that they went away determined to wipe out the stain upon their ancient and pleasant town, and to vindicate the character of intelligence and good sense which the people of Lancashire justly possess.

Report of two cases of Double Complicated Hare Lip, treated successfully by Operation. By D. LLOYD ROBERTS, M.D. London; Lewis, 1864.—Chiefly a reprint of Dr. Roberts' paper, contained in one of our early numbers. He prefers to divide the operation into two stages, and to await the perfect cure of one of the fissures before undertaking that of the other. This plan, first introduced by M. Louis, presents great advantages over that of operating on both sides simultaneously. As to the *vexata questio* of the age at which it is most desirable to operate, Dr. Roberts concurs with Bryant and some others in selecting the third month of infancy as the most eligible period. He also states that his predilections are in favour of pins over sutures, in bringing the parts into apposition after the operation. His remarks are excellent and practical.

Corrected Reports of Recent Proceedings under the New Medical Act.—By WILLIAM TALLEY, Solicitor. London; Spottiswoode and Co., 1864. Mr. Talley is well-known through the recent actions which he instituted against

persons infringing the Medical Act, and which are reported in this pamphlet. Unfortunately, though some misunderstanding with the secretary of the Medical Council (a body whose apathy to the interests of the profession is surprising, if not even disgraceful), Mr. Talley, in one instance, prosecuted a surgeon dentist, who, it was shown when the case came on before the magistrates, possessed a diploma from the College of Surgeons, although he had not been registered; and, in other instances, the want of decisive interpretation of the law by the magistrates, the shuffling and prevarications of the persons charged with illegal practice, and the Old Bailey tactics adopted by the lawyers engaged for the defence, defeated Mr. Talley in his attempts to obtain a conviction. The recent trials have, however, done good in showing the public the manner in which they allow themselves to be fleeced, and the morals of their families to be endangered by the advertising scoundrels who are a disgrace to our modern civilisation. We stated, upon good authority, in our last number that steps will most probably be taken to introduce a Supplementary Act for the amendment of the Medical Act of 1858, during the next parliamentary session; and we further observed that, in our opinion, the only effectual way of dealing with illegal practitioners would be by the appointment of a salaried prosecutor. Many eminent authorities have taken the same view of the question, and there is, consequently, some hope of the adoption of this, or a corresponding and equally efficacious scheme.

THE MONTH.

THE COMPLETION OF OUR FIRST VOLUME.

WITH this number we have the pleasure to present to our readers the Index to the First Volume of the "Medical Mirror." Instead of seizing upon this opportunity, as is too often the case, for the purpose of uttering a series of self-laudatory remarks, we shall content ourselves with the expression of our best thanks to the numerous friends who have given us their earnest support (without which we could never have hoped to have reached our present position), and with the assurance that we shall continue to use our best endeavours to deserve their friendship and co-operation.

Many valuable communications have already been promised for the ensuing year, and several improvements which

it is proposed to introduce, such as the increase of the number of pages, and the free use of small type when necessary, will combine to render our second volume superior in interest and value to the present one.

MEDICAL CANDIDATES FOR PARLIAMENTARY HONOURS.—In our last number we informed our readers that Mr. Mitchell Henry, late Surgeon to the Middlesex Hospital, had come forward as a candidate for the representation of the borough of Woodstock. Mr. Alfred Smee, F.R.S., Surgeon to the Bank of England, has since issued an address to the electors of Rochester, where he intends to contest the honour of a seat in Parliament at the coming General Election. It is understood that Mr. W. Coulson, Consulting Surgeon to St. Mary's Hospital, will offer himself as a candidate for the county of Cornwall, where he lately filled the office of High Sheriff. We are glad to be able to state that these gentlemen have excellent chances of success, and, as several other medical candidates are expected to announce themselves before the General Election, there is every probability that the medical profession will be worthily represented in the Parliament of 1865. We need scarcely urge upon every medical practitioner throughout the kingdom to do his best to bring about this desirable object.

CONVICTION OF QUACKS.—At the Central Criminal Court, on Nov. 24, the notorious quack Henery, *alias* Wray, and his accomplice, Anderson, were sentenced to two years' imprisonment each, with hard labour, for attempting to extort money by threats from an officer in the army. The case has already been fully noticed in the "Medical Mirror." Mr. Baron Bramwell, in passing sentence, said that the offence of which Henery and Anderson had been convicted was one of the most abominable that could be conceived, because in a case of this description it was not one robbery that was practised upon the individual who was the subject of it, but that it was followed up by a series of demands until his life was made positively hateful to him. He also regretted that as the offence of which they had been found guilty was unfortunately classed as a misdemeanour, so that he was unable to pass a severer sentence on the prisoners.

OXFORD UNIVERSITY.—The following gentlemen have been appointed Examiners in Medicine:—Dr. Rolleston, Mr. H. S. J. Smith, Sir B. C. Brodie, Dr. T. K. Chambers, and Dr. J. W. Ogle.

DEVON AND EXETER HOSPITAL.—Mr. J. C. Bowring, of Larkbeare, Exeter, the eldest son of Sir John Bowring, has just handed over the munificent donation of £4,000 to augment the funds of the above charity, and, in furtherance of the wishes of his deceased wife, directing that the income arising from this sum is to be expended in keeping up a ward for infants under seven years of age.

THE ROYAL SOCIETY.—Mr. J. Lockhart Clarke, F.R.S., has been awarded a Royal Medal of the Royal Society, for his valuable researches on the nervous system.

EARLY MATERNITY.—In his last report to the Registrar-General, the Registrar for Park District, Sheffield, says:—"I registered the birth of a child in my district this quarter, the age of the mother being only thirteen years and ten months. She was employed in a cotton mill in the neighbourhood of Manchester."

THE PHARMACEUTICAL SOCIETY.—A deputation of the Council of the Pharmaceutical Society of Great Britain has had an interview with the Right Hon. Sir George Grey, at the Home Office, on the subject of a proposed Bill for regulating the qualifications of chemists and druggists.

MEMORIAL TO PROFESSOR MILLER.—The friends of the late Professor Miller, of Edinburgh, have determined that some memorial is due to him. They propose, therefore, to raise a sum such as will procure new premises for the Medical Missionary Training Institution, in which he took deep interest. Already £1,000 has been subscribed.

SUNDERLAND MEDICAL SOCIETY.—G. S. Brady, M.R.C.S. England, has been elected president for the ensuing year, vice G. B. Morgan, L.R.C.S.I. Henry J. Yeld, M.D., M.R.C.S. England, has been re-elected secretary and treasurer for the ensuing year. E. A. Mealing, M.R.C.S. England, has been re-elected librarian for the ensuing year.

UNIVERSITY COLLEGE HOSPITAL.—At a late meeting of the Hospital Committee, the Chairman announced that he expected the funds of the hospital would shortly be augmented to the extent of £5,150, the following bequests having been made:—By Jacob Stiebel, Esq., £5,000, a gentleman who received his early education in the University, and thus gratefully remembered his Alma Mater; by Henry Lloyd, Esq., £100; and Z. A. Jessel, Esq., £50.

SAMARITAN FREE HOSPITAL.—Dr. Jenner and Dr. Greenhalgh have been elected Consulting-Physicians to the above institution.

MEDICAL SOCIETY OF LONDON.

November 7th, 1864.

ROBERT GREENHALGH, President, in the Chair.

After the minutes of the last meeting had been read and confirmed, and the list of donations of books in the library had been read, and thanks awarded to the donors, the following gentlemen were proposed as Ordinary Fellows of the Society:—

E. W. Tait, Esq., 1, Northampton-park, Canonbury; Dr. Eastlake, 48, Welbeck-street, W.; Henry Altmann, Esq., 5, Huntingdon-street, Barnsbury. Dr. G. Fedeli, of Rome, was proposed as a Corresponding Fellow.

Mr. DE MERIC exhibited a patient who had undergone *excision of the elbow joint* two and a half years ago. The patient was a Pole by birth, and when in France and elsewhere amputation of the arm had been recommended. He came over to London, and applied for admission into the German Hospital. Excision of the elbow was performed by Mr. de Méric, the olecranon process being left. The patient remained two or three months in the Hospital, and after his discharge Mr. De Méric had lost sight of him until lately, when he again saw the man, whom he had brought to the Society that evening, as he thought that the case would be interesting.

Mr. MASON inquired how the arm was managed after excision, and if passive motion had been used?

Mr. DE MERIC said that the arm was placed upon a splint, and that passive motion was not regularly employed.

Mr. TEEVAN complimented Mr. De Méric on the good result of his case. The patient's arm was, of course, much better than a stump could have been.

The PRESIDENT highly eulogised the success in Mr. De Méric's case, and said it was a credit to British surgery.

Mr. F. MASON exhibited a photograph sent to him from Berne, by a gentleman studying there, of a bad case of *colloid cancer of the peritoneum*.

Dr. GIBB suggested his obtaining the particulars of the case, to place upon record. He had seen probably four or five examples of this rare disease in the London Hospitals, but none of so extensive a character as that shown.

Mr. DE MERIC said the photograph gave a good idea of the disease, but the want of colouring was to be regretted in this, as in most photographic illustrations of disease. The absence of curious tints frequently spoiled the best efforts of the photographer to pourtray morbid conditions.

Mr. TEEVAN endorsed Mr. de Méric's opinion, and advocated the use of the pencil in delineating diseased structures.

Dr. GIBB then read a paper upon *Throat Cough*.—After first explaining the nature of the term, and the reasons which induced him to adopt it, he entered into a division of the subject into three varieties, according to the situation of the cough, or the causes giving rise to it, viz., in the throat proper, the larynx, and the trachea, hence the varieties of—1. True throat cough; 2. Laryngeal, or croupy cough; 3. Tracheal cough. The causes of each of these were carefully given, and their action explained. He then gave a series of illustrative cases of the varieties of throat cough.

(This paper, in full, will be found at pp. 745-758 of the present number of the "Medical Mirror.")

Dr. LEARED asked what remedies Dr. Gibb had employed, and whether the probang was not often as useful as the application of the nitrate of silver solution in fine showers, by means of the syringe described by Dr. Gibb.

Dr. M. MACKENZIE had expected to have heard some term used to define the character of the cough, by means of which others might distinguish the point of irritation giving origin to the cough.

Dr. SYMES THOMPSON asked whether Dr. Gibb had applied showers of warm water, as applied at Carterets, St. Sauveur, Luchon, and other Pyrenean springs? He thought that phthisical cough, in 99 out of 100 cases began in the throat.

Dr. GIBB said he had employed a variety of topical applications, and the recovery was often marvellously rapid. He seldom or never now employed the sponge probang, which was often used by others without the laryngoscope having been previously employed, and was exceedingly injurious in cases where the epiglottis was pendent, rather adding to the patient's sufferings, instead of relieving them. The strength of the solution of nitrate of silver he commonly used was two scruples to the ounce of water. Zinc, copper, and other substances he had also found beneficial.

Dr. ROGERS had experienced the inconvenience of the sponge probang, and now used a squeezed sponge instead. He referred to his own case, of attacks of spasm of the glottis, which were cured by Dr. Gibb, with a single application of his silver shower, by means of the fluid pulverizer.

Dr. JAMES JONES inquired if Dr. Gibb used the chlorate of potass locally, in cases of plastic exudation of the larynx?

Mr. MASON asked the strength of the solution of the sulphate of copper?

Dr. M. MACKENZIE thought the term throat-cough a compound one, which did not aid us in diagnosis.

Mr. ROGERS HARRISON wondered that the strong solution of caustic applied in acute inflammation of the larynx did not increase the evil.

Dr. LEARED observed that laryngeal phthisis was very fatal, and asked Dr. Gibb's mode of treatment.

Dr. ABBOTTS SMITH inquired how many drops were injected at each application of the shower to the larynx? He also asked if Dr. Gibb used the bromide of potassium, as he himself had found it very serviceable in 5 to 10 grain doses, three times a day, in the treatment of cases of cough, accompanied by irritability of the larynx and trachea.

Dr. GIBBON spoke of capsicum as being of some use, and asked if it might be locally applied.

The PRESIDENT inquired of the author if he found external irritants of use, and if the bromide of ammonium or chloroform were useful as sedatives, or atropine and belladonna applied externally to allay spasm. He believed that there was more spasm arising from irritation at the upper than the lower part of the larynx.

Dr. GIBB stated in reply that he found chloroform occasionally useful, in lessening extreme irritation and sensibility, the patient inhaling small quantities only of it. He rarely resorted to external applications, but did so occasionally, and had found belladonna serviceable. The bromide of ammonium, as well as some of the other bromides, he frequently employed with the greatest advantage, and he believed in time that they would be recognised as some of the most valuable therapeutic agents we possessed. He seldom injected more than one or two drops of any solution into the larynx in the form of spray. The rapidity with which the solutions of nitrate of silver of certain strengths, checked inflammation was remarkable, and cases of acute catarrhal laryngitis could often be overcome in 24 or 36 hours, by solutions of the strength of two to four scruples, or even more, to the ounce of water, and this was a fact that was now confirmed by Mackenzie and others. Weak solutions produced great irritation, but those of a certain strength could be relied upon to produce particular effects. This applied also to the solutions of other substances, which he was in the habit of employing. He had used the capsicum sometimes locally, and the chlorate of potash in gargles, but had not injected showers of warm water. Inhalation of steam he had recommended when necessary. The treatment of laryngeal phthisis would depend upon the conditions present: the great point is to heal up the ulcers, and prevent their extending to the deeper structures, *e.g.*, the cricoid and arytenoid cartilages. But oftentimes the progress of the malady was such that the lungs were invaded, and our efforts were then only palliative. Early treatment was of great consequence. With regard to the term throat cough, he employed it generally to designate cough originating in disease in some parts of the throat apparatus, and he divided it into three varieties: 1st, the true throat cough, originating in the parts above the larynx; 2nd, the laryngeal or croupy cough, the origin of which was some lesion in the larynx itself; and 3rd, the tracheal cough, originating wholly in the trachea. It was impossible to define the character of the cough by the mere sound, although that sometimes could be done. For instance he could tell whether any of his hearers had a pendent epiglottis by the peculiar sound of the cough it would give rise to; the same might be said of certain states of the larynx. The diagnosis was, however, to be made out with the laryngoscope, and a supposed chest cough could be determined to be one originating in disease of the throat or larynx. Indeed, some of the cases of throat cough that had come before him, had been treated as chest affections, and on discovering the real nature of the malady, the cure was a matter of a few days, as in many of the cases he had detailed.

November 21st, 1864.

R. GREENHALGH, M.D., President, in the Chair.

Dr. HABERSHON exhibited a preparation of *Cicatrix of the œsophagus*, taken from a cabinetmaker aged 64, who had dysphagia for one year before his admission into Guy's Hospital, with pain at the sternum. He

became very ill six weeks before admission. The upper half of the body was swollen and œdematous, the face covered with red patches, and he was extremely depressed ; no solid, and but little fluid, food could be swallowed. There was no evidence of obstruction about the throat or neck. There was some cough and expectoration of mucus. No albumen in the urine. The dysphagia increased, and then offensive purulent sputa were expectorated apparently from the pharynx, and he died. A cicatrix was found $1\frac{1}{2}$ inch long at the upper part of the œsophagus, which had led to the dysphagia some twelve months before death ; there was no evidence of cancer, or of syphilis. He (Dr. Habershon) thought that the affection arose from some local irritation or ulceration at the part.

THE PRESIDENT inquired what was the cause of the œdema.

DR. HABERSHON said that compression of the brachio-cephalic veins was believed to have produced it.

DR. GIBB had seen some cases of ulceration of the œsophagus at its upper part, and at the lower part of the pharynx, and more especially at the pharyngeal surface of the cricoid cartilage, made out with the aid of the laryngeal mirror. One very interesting case was under his care at the Westminster Hospital for some time ; the patient ultimately died from the dysphagia in the country, and no autopsy was obtained. He inquired if Dr. Habershon had passed a bougie into the throat of the patient ?

DR. HABERSHON said there was too much irritability to use the laryngoscope, and he did not like to pass a bougie for fear of passing through the affected part.

DR. LEARED referred to post-pharyngeal abscess, and thought the disease might have arisen in disease of that kind.

DR. HABERSHON thought it might have been so.

DR. LEARED related a *Case of Ulceration of the Tongue* in a gentleman aged 62, who consulted him in April last. It was present in the middle of the tongue, on the dorsum, and the size of a shilling, and was a constant source of annoyance. It had not healed for many years ; thirty years ago he had had primary syphilis. He gave him arsenic internally, and applied nitrate of copper locally ; this was continued for twenty-five days, and then he prescribed Donovan's Solution. This healed up the sore completely, and now it is five months since, and the patient continues well.

DR. BROADBENT related a case of *Syphilitic disease of the Brain* in a young man who had a primary syphilitic sore, and subsequently had fits and became maniacal, and then almost imbecile. Was treated by iodide of potassium, and is now free from fits, and comparatively cured after an interval of fifteen months. He thought the pia mater affected.

DR. KINGSLEY, of NEW YORK, exhibited his mode of treatment of *Congenital Cleft Palate*. It consists in filling up the cleft by soft vulcanized india-rubber. The result of this is that it enables the patient to learn to speak quite well. It never produces any irritation, and can be worn constantly if desired, but is usually removed every night.

MR. BALMANNO SQUIRE read a paper *On the diseases of the Skin caused by the Acarus*.

MR. DE MERIC said, the difficulty he had found in these cases was to disinfect the clothes. The disease would reappear on wearing them. He would suggest two apparatuses in hospitals, one for generating a strong heat, and another for generating chlorine ; even at dispensaries also for this purpose. In the treatment the ointment used is very successful. At St. Louis, in Paris, they rub the patients for two hours, indeed they are most cruelly rubbed, and the clothes in the meanwhile are undergoing disinfection.

DR. LEARED observed that there was one practical point the author had not touched upon. Is it the ointment or the sulphur which kills the insects ? On the Continent they use the oil, which is said to kill them by

asphyxia. He would like to know about this. Would the Turkish bath be effectual in destroying them?

DR. E. DAY asked if the authors had tried the iodide of potassium in any of these cases. The lotion of it he had found effectual.

DR. TILBURY FOX remarked that scabies had been especially prevalent since the Crimean war. It is on the increase, and there is no disease in which there are so many errors made. In the majority of cases the focus of it is in the wrists. Does it ever occur in the face? Dr. Jenner says not, but he himself had actually found it in the face.

DR. FRODSHAM said they perform the cure by producing a more horrible disease at St. Louis. The compound sulphur ointment is a most barbarous compound, and quite mechanical in its action.

DR. ALTHAUS stated that the Turkish bath had been used for years in Germany for scabies, ten or twelve persons are in it at a time.

DR. HULKE had not seen the relapses follow that had been stated.

DR. HILLIER had seen the St. Louis operation in practice, and the patients were amused and delighted with it. He had not found any troublesome eruption result from the treatment. Soaping and soaking is a good mode of cure. The acarus produces great torment in some persons.

THE AUTHOR then replied. He had not found his treatment bad or cruel, he thought the sulphuret of calcium bad, as it dissolved the hairs and cuticle, and was painful. The Turkish bath was good in theory, but practice did not bear it out.

MR. HENRY LEE read a paper *On the different modes in which Constitutional Syphilis may be communicated.*

MR. HENRY SMITH bore testimony to the test of inoculation in syphilis, *i. e.*, that soft chancre will produce a similar sore, and the Hunterian will not. He gave a case in point of a syphilitic sore on the lip of a patient, contracted from a secondary sore on the tongue of a female.

MR. SQUIRE thought that in these cases the communication arose from mucous tubercles occurring on the lips, anus, or other mucous parts.

DR. ANSTIE referred to a case of the breast of a respectable woman which was affected through a syphilized child.

MR. MASON'S mind was set at rest by the Author's paper, in respect to a case of infecting sore on the lower lip of a man who had enlarged glands of his lower jaw.

MR. HULKE added another case of primary sore on the lower lip from secondary eruption in a young man.

MR. WALTER COULSON asked what form of secondary syphilis would give rise to syphilis again. He had tried inoculation several times at the Lock Hospital and had never been successful.

MR. DE MERIC observed that the paper contained a good deal of original matter and instruction. The Author had tried to depreciate the hard chancre, but he himself was inclined to give that form of chancre its full due. The Author had given a number of infantile cases which were confirmatory of his views, and not denied by Ricord.

THE AUTHOR then replied, and the Society adjourned.

PASS-LISTS.

UNIVERSITY OF LONDON.—The following is a list of candidates who passed the late Second M.B. Examination:—First Division: Best, Palemon, University College; Carter, William, Charing-cross and St. Thomas's Hospitals; Casey, Edward, King's College; Coombs, Carey Pearce, St. Mary's Hospital; Day, Edwin Edmund, King's College; Edwards, Thomas Marsden,

Andersonian Institution ; Fairbank, Thomas, St. Bartholomew's Hospital ; Fox, Edward Lloyd Harries, University College ; Hingston, Charles Albert, St. Bartholomew's Hospital ; Hooper, John Harward, St. Thomas's Hospital ; Kempthorne, Henry Law, King's College ; Ludlow, Ebenezer, St. Bartholomew's Hospital ; Miller, Richard May, B.A., University College ; Morton, John, St. Thomas's Hospital ; Nunneley, John Albert, Leeds and Guy's Hospitals ; Phillips, John Jones, Guy's Hospital ; Rickards, Walter, University College ; Simms, Frederick, King's College ; Smith, William Frank, Guy's Hospital ; Wesley, John Sebastian, King's College. Second Division : Edis, Frederick Pooley, Westminster Hospital ; Hinds, James, Queen's College, Birmingham ; King, George, London Hospital ; Taylor, Shephard Thomas, King's College ; Willey, Henry, King's College ; Woodhouse, Thomas James, St. Thomas's Hospital.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a general meeting of the Fellows, held on Friday, September 30th, 1864, the following gentlemen, having undergone the necessary examination, were duly admitted members of the College :—Fox, Cornelius Benjamin, M.D., Edin., Truro, Cornwall ; Stevenson, Thomas, M.B., Lond., Guy's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College, at a meeting of the Court of Examiners on 15th November :—Ayres, Philip Burnard Chenery, Bedford ; Bloxham, John Astley, Russell-square ; Bryan, Edward, Frisby-on-the-Wreake, Leicestershire ; Bush, Richard Hake, York-terrace, Regent's-park ; Cameron, Archibald Henry Foley, Edinburgh ; Clapp, Albert John, M.D., Cork ; Cooke, Alfred Square, Gloucester ; Davies, Thomas, Abergele, N. Wales ; Edis, Frederick Pooley, M.B., Huntingdon ; Elliot, John, Stratford, Essex ; Green, Thomas Wimpenny, M.D., Rawtenstall, Lancashire ; Groves, Joseph, Newport, Isle of Wight ; Hudson, Daniel, Rocester, Staffordshire ; Jackson, George, Plymouth ; Laidman, William Follitt Montague, Exeter ; Pearse, George Edmund Legge, Regent-street, Westminster ; Price, John Lowe, Wrexham ; Ryder, Dudley Howe, Greenwich ; Saunders, Charles Edward, Clapham ; Smith, James William, Whitby ; Waymouth, Albert, H.M. Dockyard, Deptford ; Wolferstan, Sedley, L.R.C.P. Lond., Plymouth ; Wright, David, Edinburgh. The following gentlemen were admitted Members on November 16th :—Brideoake, Robert Farrar, Leigh, Lancashire ; Corbin, Thomas Wilson, Hornsey ; Craigie, John, Hackney ; Dawson, Henry, Church-road, Islington ; Dwyer, John Cornelius, Woolwich ; Haslewood, Albert Octavius, Darlington ; Hatherly, Henry Reginald, Derby ; Jones, Robert Arthur, Carnarvon ; Lynch, Jordan Roche, Notting-hill ; M'Millan, Samuel Scott, Bolton, Lancashire ; Oliphant, John, M.D., Edinburgh ; Pogson, William, Seacroft, near Leeds ; Quin, John, Hogan, Dublin ; Rigden, George William, Canterbury ; Rigg, Thomas, M.D., Carlisle ; Roberts, Edward Coldridge, Exeter ; Scott, Robert John, C.M., Omagh ; Snow, William Vicary, Barnstaple ; Wilford, John George Frederick, Brompton, Yorkshire.

The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on November 10th :—Kimble, Jonathan Henry, Knowle, Warwickshire ; Pooley, Charles, Weston-super-Mare ; Russell, William Cook, Doncaster ; Waring, Edwin John, H.M. Indian Army. The following gentlemen were admitted as Members on November 17th :—Compton, Thomas A., B.A., Christchurch, Hants ; Dalton, Thomas, M.D., Wigton, Cumberland ; Forster, Edward Wood, Newcastle-on-Tyne ; Glynn, Thomas Robinson, Liverpool ; Grosvenor, Alfred Octavius, Alsager, Cheshire ; Harvey, Walter Anstice, South Pether-ton ; Heaven, Charles Thomas, London ; Hora, Tudor, Westbourne-terrace ; Jones, James, Kingston-on-Thames ; Leacock, Charles George, Puckeridge, Herts ; Mackey, Edward, Birmingham ; Marshall, Francis John, Moulton, Northamptonshire ; Massy, George, Dublin ; O'Leary, Edmund, Tipperary ;

Ryder, Henry Thomas, Devonport; Snowdon, John Pringle, Newcastle; Spencer, Lionel Dixon, M.D., Newcastle; Taylor, Herbert, M.D., Rutland-street; Willson, Henry, Strand; Woodford, Edward Russell, Ventnor, Isle of Wight. The following gentlemen were admitted Members on November 18th :—Anstey, Arthur Newland, Adelaide, Australia; Cole, Richard Bearsly, M.D., San Francisco; Duke, Olliver Thomas, Kennington; McFarlan, John Moorehead, Muiravonside, Stirlingshire; Manley, John, West Bromwich; Ray, William, West-square, Southwark; Rogers, William Moon, Mauritius. At the same meeting of the Court, Mr. Charles Strickland, of H.M.S. *Supply*, Woolwich, passed his examination for Naval Surgeon.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practice, on the 3rd November :—Adams, Arthur Bayley, Lymington, Hants; Benson, Joseph Henry, Cambridge; Gill, George, Liverpool Royal Infirmary; Reed, Walter Hugo, Tiverton, Devon. On November 10th :—Powell, Frederick, Westminster Hospital; Powell, Llewellyn, St. Bartholomew's Hospital; Scott, Robert John, St. Thomas's Hospital. —As an Assistant: Joss, Adam Dawson, Cannon-street Road, E.—On November 17th :—Brewster, Edward, Grantham; Child, Edwin, Richmond, Surrey; Haxworth, Walter, Barnsley; Müller, Augustus Christian, St. Mary's Terrace; Smith, George, Kentish Town; Smith, Henry Richard, Newark; Tomlinson, Daniel Webster, St. Mary's Hospital.—As an Assistant: Garman, John Stephen, Western General Dispensary. On November 24th :—Clark, William Falconer, Cunningham-place; Lattey, Walter, Manor-street, Clapham; May, Augustus Square, Plymouth; Swindale, John, Appledore, Devon; Steele, Henry Octavius, Gomersal, Yorkshire. The following passed the first examination on November 24th :—Stuart, Robert, Guy's Hospital; Searle, George Clements, and Underhill, Francis William, St. George's Hospital; Horne, Edward, Charing Cross Hospital.

VACANCIES.

SOUTH STAFFORDSHIRE GENERAL HOSPITAL.—For a House Surgeon. Applications to be sent in before December 17th. Election on December 27th. Further particulars to be obtained from Mr. Pursell, the secretary, at the Hospital, Wolverhampton.

STAMFORD HILL, CLAPTON, AND STOKE NEWINGTON DISPENSARY.—For a Resident Assistant-Surgeon. Salary, £40 per annum, with board and residence. Personal applications (or by letter, where the former is inconvenient) to be made to the Resident Medical Officer, at the Dispensary, Stoke Newington, N.

ROCHFORD UNION, ESSEX.—For a Medical Officer for the Union Workhouse. Salary, £40. Also for a Medical Officer for the Rochford District of the Union. Salary, £64 per annum. Applications to be forwarded before December 13th, the day of the election.

GARSTANG UNION, LANCASHIRE.—For a Medical Officer for the Forton District. Salary £45, with usual extras. Election on December 15th.

WESTMINSTER GENERAL DISPENSARY.—For a House Surgeon. Salary, £100, with rooms, attendance, coals, and gas. Duties are to dispense, and to visit the home-patients. Applications to be sent to the Secretary, Gerrard-street, Soho, W., on December 3rd. Election on December 8th.

ROYAL PIMLICO DISPENSARY.—For a Surgeon, to fill up a vacancy in the Honorary Medical Staff. Applications to be sent on or before December 3rd.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.—For an Honorary Surgeon. Applications to be forwarded before December 10. Election fixed for December 14.

APPOINTMENTS.

ANDERSON, J. F., M.D.—Physician to the Farringdon General Dispensary.

BAGSHAW, F., M.B.—Physician to the Western General Dispensary.

BATTERTON, S. W., Esq.—Medical Officer for the Runcorn District of the Runcorn Union, Cheshire.

BECK, J. T., Esq.—Medical Officer to the Cambridge Union Workhouse.

CLAYTON, J., Esq.—Visiting Medical Officer to the Banffshire Lunatic Asylum.

CROUCH, G. J., Esq.—House Surgeon to the London Surgical Home for Diseases of Women.

DAVIDSON, F., M.D., Esq.—Medical Officer for the No. 4 District of the West Ham Union.

DAVIS, R. A., M.D.—Resident Medical Officer to the New Asylum for the county of Stafford, at Burntwood.

DIXON, T., M.D.—Physician to the Metropolitan Convalescent Institution.

DUKE, Allen, M.D.—Consulting Surgeon to the Chichester Infirmary.

GAYTON, W. Esq.—Medical Officer for No. 4 District of Bethnal Green Parish.

HARDESTY, J. J., Esq.—Medical Officer for the Parish of Whittingham Haddingtonshire.

HEYGATE, W. N., Esq.—Resident Surgeon to the Reading Dispensary.

HYDE, G. E., Esq.—Surgeon to the Worcester Ophthalmic Hospital.

JACKSON, J., Esq.—Medical Officer for No. 4 District of the Bridlington Union, Yorkshire.

JEFFERY, E., Esq.—Assistant Medical Officer to the Stafford County Lunatic Asylum.

KEMPTHORNE, H. L., Esq.—Resident Medical Officer to the Carey-street Dispensary, Lincoln's-Inn-Fields.

KING, T. W., M.D.—Medical Officer to the Camberwell Provident Dispensary.

KNAGGS, S. H., Esq.—Medical Officer for the North District of the Parish of St. Pancras.

KNOTT, G. A., M.D.—Medical Officer for No. 3 District of the Brackley Union, Northamptonshire.

LOMAX, H. T., Esq.—Certifying Factory Surgeon for the District of Stafford.

M'KENDRICK, J. G., M.D.—Resident Medical Officer to the Eastern Dispensary, Whitechapel.

MAKENS, J., Esq.—Medical Officer for the Middleton District of the Teesdale Union, Durham.

MANSON, A. J., M.D.—Visiting Medical Officer to the Banffshire Lunatic Asylum.

PAGE, A. H., M.D.—Surgeon to the Royal Albert Hospital, Devonport.

PHELPS, W. H. G., M.D.—Medical Officer for the No. 10 District of the Axbridge Union.

SANDELL, H. W., Esq.—Resident Surgeon to the Halifax Infirmary.

SCRIVENER, G., Esq.—Medical Officer for the Tiley District of the Scarborough Union.

SPENCER, E., Esq.—Medical Officer for the Winster District of the Bakewell Union.

STURKEY, H. G., Esq.—Medical Officer for the Gedney Hill District of the Holbeach Union.

TAYLOR, J., Esq.—Medical Officer for the Eyam District of the Bakewell Union.

THOMPSON, J., Esq.—Medical Officer for the North-East District of the Parish of St. Pancras.

WARBURTON, J. W., Esq.—Resident Medical Officer to the County Asylum, Lancaster.

WILLIAMS, C., Esq.—Honorary Surgeon to the Norwich Dispensary.

WILLIAMS, K. H., Esq.—Medical Officer for the Creuddyn District of the Conway Union.

WILLIAMS, W. H., M.D.—Medical Officer for the Sherborne Union Workhouse.

WILSON, W. C., M.D.—Medical Officer for the St. Aubyn and Morice District of the Stoke Damerel Union.

WILTON, F., Esq.—Resident Medical Superintendent to the Carmarthen-shire, Pembrokeshire, and Cardiganshire Lunatic Asylum.

DEATHS.

BLETCHLEY, E., Esq., M.R.C.S., of Tabernacle-row, on October 29, aged 32.

BOWLER, J. W., M.D., Deputy Inspector-General of Hospitals (retired), on November 16.

CASEY, JOHN, Esq., Surgeon, at Chapel-terrace, St. Helen's, on October 28, aged 76.

CRAIG, J. S., Esq., L.R.C.P., Edin., at Stratford-on-Avon, on October 28.

FLETCHER, J., Esq., at Oldham, on November 12, aged 52.

GABRIEL, E. N., Esq., M.R.C.S., at Weston Hill, Norwood, on October 31, aged 64.

GRAY, DR., late of Amersham, Bucks, at Bayswater, on October 25, aged 71.

GRIMBLY, OWEN, M.D., at Banbury, on October 31, aged 25.

HISLOP, P. B., M.D., at Dean Park, Govan, Glasgow, on October 27, aged 43.

JOHNSTON, A., Esq., L.F.P. and S., Glasgow, at Buccleugh House, Glasgow, on November 8.

MARSLAND, ROBERT, Esq., M.R.C.S., of Oak-street, Manchester, on November 8, aged 38.

M'EWEN, WILLIAM, Esq., Surgeon, formerly of Rothesay, Scotland, on November 6, at Glasgow.

ORMSBY, R., Esq., M.R.C.S., at Durrow, Queen's County, Ireland, on November, 7, aged 55.

PRICE, PETER CHARLES, Esq., F.R.C.S., at Ventnor, on November 13. The deceased was the son of Dr. Price, of Margate, and having shown a taste for his father's profession entered as a student at King's College, where he distinguished himself by his assiduity and abilities. He subsequently filled the office of Surgeon to the Blenheim Dispensary and to the Great Northern Hospital, and in 1861 was appointed Assistant-Surgeon to King's College Hospital. His constitution, never very strong, broke down soon after he had assumed the duties of the last-named office, and he was compelled to resign his appointments, and to visit the south of France for the sake of his health. Here he settled down at Mentone, where he practised for a time, but further phthisical symptoms developed themselves, and in the summer of this year he came home to England, hopelessly ill. He was one of the most prominent young surgeons of the day, and, had his life been spared, would have achieved a high position in the profession. His skill as an operator was very great, and his contributions to medical literature were distinguished alike by their usefulness and the scholarly manner in which they were written.

ROWLAND, R., Esq., Surgeon, at Weston-Zoyland, near Bridgewater, on October 19, aged 72.

SEAGRAM, W. FROWD, Esq., F.R.C.S. of Warminster, Wilts, on November 8, aged 88.

SPEEDY, R. D., Esq., F.R.C.S., J., of Gardiner's Place, Dublin, on November 12, aged 54.

THORPE, G. B., Esq., F.R.C.S., of Staveley, Derbyshire, on October 26.

BOOKS RECEIVED.

"Outlines of Surgical Diagnosis." By George H. B. Macleod, M.D., F.R.C.S.

"Practical Observations on the Hygiene of the Army in India: Including Remarks on the Ventilation and Conservancy of Indian Prisons; with a chapter on Prison Management." By Stewart Clark, M.R.C.S.

"Entozoa: an Introduction to the Study of Helminthology. By F. S. Cobbold, M.D., F.R.S.

"Clinical Lectures and Reports." By the Medical and Surgical Staff of the London Hospital. Vol. I., 1864.

"Organic Philosophy; or Man's True Place in Nature." By Hugh Doherty, M.D.

"The Painless Extinction of Life in Animals designed for Human Food." By Henry MacCormac, M.D.

"An Inquiry into the Physiological and Medicinal Properties of the *Veratrum Viride*." By Samuel R. Percy, M.D.

"The Anthropological Review." (Nov.)

"Gazette Médicale de Paris." (Nov.)

"Social Science Review." (Nov.)

"The American Journal of Medical Science." (Oct.)

"The Canada Lancet." (Oct.)

"The Journal of British Ophthalmology." No. 1.

"Journal de Médecine Mentale." (Nov.)

"The Pharmaceutical Journal." (Nov.)

"The Journal of Mental Science." (No. 51.)

"The Dental Review." (No. 4.)

"On Impetigo Contagiosa, or Porrigo." By Tilbury Fox, M.D.

"The Oration Delivered at the Ninety-first Anniversary of the Medical Society of London." By J. L. W. Thudichum, M.D.

"Ninth Annual Report of the West Kent Medico-Chirurgical Society."

"Corrected Reports of Recent Proceedings under the New Medical Act." By William Talley.

"Annual Report of the Bourton-on-the-Water and Cotswold Village Hospital."

1. "Cambridge: Its University and Colleges." 2. "The Address in Surgery, delivered at the Thirty-second Annual Meeting of the British Medical Association." 3. "On the Growth of the Jaws." By G. M. Humphry, M.D., F.R.S.

"Dublin Medical Press." (Nov.)

"A Lecture on the Sanitary Condition of Ulverston." By Dr. Lankester, F.R.S.

"Report of Two Cases of Double Complicated Hare-lip Treated successfully by Operation." By D. Lloyd Roberts, M.D.

NOTICE.—In consequence of an unavoidable delay which has arisen in connection with the Index, which accompanies this Number, the *Medical Mirror* will not be in the hands of the subscribers until rather later than is usually the case. We trust, however, that the completeness of the Index for Vol I., which we have the pleasure to present to our readers, will fully make up for this slight delay.

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